

SEQUENCE LISTING

<110> ROSENTHAL, ANDRÉ et al.
<120> Nucleic Acid Molecules encoding proteins which influence bone development
<130> 0147-0211P
<140> PCT/EP99/02055 <141> 1999-03-26
<150> DE 198 13 799.0 <151> 1998-03-27
<160> 21
<170> PatentIn Ver. 2.1
<210> 1
<211> 1550 <212> DNA
<213> Mus musculus
<220>
<221> CDS <222> (2). (1180)
<400> 1
c ctc ggc cga agt aaa gta gct gct gag aga gcc aca agt gtc tac ttg 49 Leu Gly Arg Ser Lys Val Ala Ala Glu Arg Ala Thr Ser Val Tyr Leu
1 5 10 15
gtc cag aag gtg gtc ccc atg ctt ccc agg ctt ctg tgt gag gaa ctc 97
Val Gln Lys Val Val Pro Met Leu Pro Arg Leu Leu Cys Glu Glu Leu 20 25 30
tgc agc ctc aac ccc atg act gac aag ctg acc ttc tct gtg atc tgg 145
Cys Ser Leu Asn Pro Met Thr Asp Lys Leu Thr Phe Ser Val Ile Trp 35 40 45
aag ctg acc cct gaa ggc aag atc ctt gaa gag tgg ttt ggc cgc act 193 Lys Leu Thr Pro Glu Gly Lys Ile Leu Glu Glu Trp Phe Gly Arg Thr
50 55 60
atc atc cgt tct tgc acc aaa ctg agc tac gac cat gcc cag agc atg 241 Ile Ile Arg Ser Cys Thr Lys Leu Ser Tyr Asp His Ala Gln Ser Met
65 70 75 80
atc gaa aat cca act gag aag atc cct gag gaa gag ctt ccc cca att 289
Ile Glu Asn Pro Thr Glu Lys Ile Pro Glu Glu Glu Leu Pro Pro Ile 85 90 95
Ser Pro Glu His Ser Val Glu Glu Val His Gln Ala Val Leu Asn Leu
100 105 110
cac agc att gca aag caa ctc cgc cgc cag cgc ttt gta gat ggc gca 385 His Ser Ile Ala Lys Gln Leu Arg Arg Gln Arg Phe Val Asp Gly Ala
115 120 125
ctc cgt tta gat cag gag ttc atg ctc ctg gcc aac atg gcg gtg gcc 433
Leu Arg Leu Asp Gln Glu Phe Met Leu Leu Ala Asn Met Ala Val Ala 130 135 140

						ttc Phe										481
ccc Pro	cca Pro	cca Pro	cag Gln	acg Thr 165	aag Lys	atg Met	ctc Leu	agt Ser	gac Asp 170	ctg Leu	gtg Val	gag Glu	ttc Phe	tgt Cys 175	gac Asp	529
cag Gln	atg Met	Gly 999	ctg Leu 180	ccc Pro	atg Met	gat Asp	gtc Val	agc Ser 185	tct Ser	gca Ala	ggg Gly	gcc Ala	cta Leu 190	aat Asn	atg Met	577
gca Ala	ctg Leu	tac Tyr 195	ttc Phe	tgc Cys	tct Ser	ggg Gly	atg Met 200	ctg Leu	cag Gln	gac Asp	cag Gln	gag Glu 205	cag Gln	ttc Phe	cgg Arg	625
cat His	tat Tyr 210	gct Ala	ctc Leu	aac Asn	gtt Val	ccc Pro 215	ctc Leu	tac Tyr	aca Thr	cac His	ttc Phe 220	acc Thr	tct Ser	ccc Pro	atc Ile	673
cgc Arg 225	cgc Arg	ttt Phe	gct Ala	gac Asp	gtc Val 230	ata Ile	gtg Val	cac His	cgc Arg	ctc Leu 235	ctg Leu	gct Ala	gct Ala	gct Ala	ctg Leu 240	721
						gat Asp										769
gct Ala	gac Asp	cac His	tgc Cys 260	aat Asn	gac Asp	cgt Arg	cgc Arg	atg Met 265	gct Ala	tcc Ser	aaa Lys	cgt Arg	gtg Val 270	cag Gln	gag Glu	817
ctc Leu	agc Ser	atc Ile 275	ggc Gly	ctc Leu	ttc Phe	ttc Phe	gca Ala 280	gtt Val	cta Leu	gta Val	aag Lys	gag Glu 285	agt Ser	ggc Gly	ccc Pro	865
ctg Leu	gag Glu 290	tcc Ser	gaa Glu	gcc Ala	atg Met	gtg Val 295	atg Met	ggt Gly	gtc Val	ctg Leu	aac Asn 300	caa Gln	gct Ala	ttc Phe	gac Asp	913
gtg Val 305	ctg Leu	gtg Val	ctg Leu	cgc Arg	ttt Phe 310	ggg ggg	gtg Val	cag Gln	aag Lys	cgc Arg 315	atc Ile	tac Tyr	tgc Cys	aat Asn	gca Ala 320	961
ctg Leu	gcc Ala	ctg Leu	cga Arg	tcc Ser 325	tac Tyr	agc Ser	ttc Phe	cag Gln	aag Lys 330	gtg Val	gly	aag Lys	aag Lys	cca Pro 335	gag Glu	1009
ctc Leu	act Thr	ctt Leu	gtt Val 340	tgg Trp	gag Glu	cct Pro	gat Asp	gac Asp 345	ctt Leu	gaa Glu	gag Glu	gag Glu	cca Pro 350	aca Thr	cag Gln	1057
						agc Ser										1105
gcc Ala	aca Thr 370	Ala	ctc Leu	aag Lys	tac Tyr	agt Ser 375	gct Ala	atc Ile	ctg Leu	aag Lys	cga Arg 380	cca Pro	ggc Gly	ctg Leu	gag Glu	1153
_			_			cct Pro			tga	atgc	tag	ccca	agcc	ag		1200

gcctgtgcct gccctaccct gctggcttt aggaatagga ccttttgaca ccaaagggga 1260
tttttaattt ggttttaac aactcagggg tttgtttta tttttatttt tccttttatt 1320
ttacttttgc agctcagttt ttaaatgaac tggaaggtta ggggtcaggg caggggatgc 1380
tgaggcctgg cctgtgcttc cctgagcaga gaggatccca gtcctcctgg gcaggcagcc 1440
ccgcttctac caggcgaccc actgcccttc cctgcccagg aaatgggggg tttcagcaaa 1500
tcagtgtcat ggaataaaat caagtgtgaa ttgcaaaaaa aaaaaaaaa 1550

<210> 2

<211> 393

<212> PRT

<213> Mus musculus

<400> 2

Leu Gly Arg Ser Lys Val Ala Ala Glu Arg Ala Thr Ser Val Tyr Leu
1 5 10 15

Val Gln Lys Val Val Pro Met Leu Pro Arg Leu Leu Cys Glu Glu Leu
20 25 30

Cys Ser Leu Asn Pro Met Thr Asp Lys Leu Thr Phe Ser Val Ile Trp 35 40 45

Lys Leu Thr Pro Glu Gly Lys Ile Leu Glu Glu Trp Phe Gly Arg Thr 50 55 60

Ile Ile Arg Ser Cys Thr Lys Leu Ser Tyr Asp His Ala Gln Ser Met 65 70 75 80

Ile Glu Asn Pro Thr Glu Lys Ile Pro Glu Glu Glu Leu Pro Pro Ile 85 90 95

Ser Pro Glu His Ser Val Glu Glu Val His Gln Ala Val Leu Asn Leu 100 105 110

His Ser Ile Ala Lys Gln Leu Arg Arg Gln Arg Phe Val Asp Gly Ala 115 120 125

Leu Arg Leu Asp Gln Glu Phe Met Leu Leu Ala Asn Met Ala Val Ala 130 135 140

His Lys Ile Phe Arg Thr Phe Pro Glu Gln Ala Leu Leu Arg Arg His 145 150 155 160

Pro Pro Pro Gln Thr Lys Met Leu Ser Asp Leu Val Glu Phe Cys Asp 165 170 175

Gln Met Gly Leu Pro Met Asp Val Ser Ser Ala Gly Ala Leu Asn Met 180 185 190

Ala Leu Tyr Phe Cys Ser Gly Met Leu Gln Asp Gln Glu Gln Phe Arg 195 200 205

His Tyr Ala Leu Asn Val Pro Leu Tyr Thr His Phe Thr Ser Pro Ile 210 215 220

Arg A	rg Ph	e Ala	Asp	Val 230	Ile	Val	His	Arg	Leu 235	Leu	Ala	Ala	Ala	Leu 240	
Gly T	yr Se	r Glu	Gln 245	Pro	Asp	Val	Glu	Pro 250	Asp	Thr	Leu	Gln	Lys 255	Gln	
Ala A	sp Hi	s Cys 260		Asp	Arg	Arg	Met 265	Ala	Ser	Lys	Arg	Val 270	Gln	Glu	
Leu S	er Il 27	_	Leu	Phe	Phe	Ala 280	Val	Leu	Val	Lys	Glu 285	Ser	Gly	Pro	
Leu G 2	lu Se 90	r Glu	Ala	Met	Val 295	Met	Gly	Val	Leu	Asn 300	Gln	Ala	Phe	Asp	
Val L 305	eu Va	l Leu	Arg	Phe 310	Gly	Val	Gln	Lys	Arg 315	Ile	Tyr	Cys	Asn	Ala 320	
Leu A	la Le	u Arg	Ser 325	Tyr	Ser	Phe	Gln	1330	Val	Gly	Lys	Lys	Pro 335	Glu	
Leu T	hr Le	u Val 340	_	Glu	Pro	Asp	Asp 345	Leu	Glu	Glu	Glu	Pro 350	Thr	Gln	
Gln V	al Il 35		Ile	Phe	Ser	Leu 360	Val	Asp	Val	Val	Leu 365	Gln	Ala	Glu	
Ala T	hr Al 70	a Leu	Lys	Tyr	Ser 375	Ala	Ile	Leu	Lys	Arg 380	Pro	Gly	Leu	Glu	
Lys A 385	la Se	r Asp	Glu	Glu 390	Pro	Glu	Asp								
<210> <211> <212> <213> <220> <221> <222>	1140 DNA Homo	-													
	cac His							la L					is P	cc ccg ro Pro 15	49
ccc c Pro G			Met		_	_	_		_		_	_			97
ggg c Gly L	eu Pr														145
tac t Tyr P															193
gcg c Ala L				_						_					241

65					70					75					80	
											gcc Ala					289
		_		_	_			-		_	cag Gln		_		-	337
	_		_	_	_	_			_	_	gtg Val	_			_	385
	_				_	_	_	-	_		agt Ser 140			-		433
											gcc Ala					481
_	_	_									tgc Cys					529
_						_	_			_	aag Lys	_	-		_	577
											cca Pro					625
					_						cag Gln 220					673
											ggc Gly					721
											ggt Gly		Pro			769
	agc Ser		_	tgag	gctco	cac o	cagco	egcct	g co	ccg	cctgo	ccc	egaet	gcc		821
tgto	ccgc	ca c	cacto	gctt	t aç	ggaco	tgtt	gad	cacgo	gagg	gggg	gttt	ta a	attt	ggtttt	881
taac	caact	ca ç	gggt	ttgt	t tt	tatt	ttta	a ttt	caatt	ttt	gcag	gctca	aac t	ttta	aacaa	941
acto	gcagg	igg a	ıgagç	gtgg	g go	ctgga	agga	a agg	gctga	aggc	ctgg	gtcag	gca g	gtgad	cccag	1001
caga	gcag	gc c	ccaç	gtcct	c ct	ggga	aggct	ggo	cccc	cctt	tttt	ctgg	ggc (cctac	etgece	1061
tcct	ctgo	cc a	ıggaa	atgg	ia aa	gggtt	tcas	gcaa	actca	agtg	tcac	agaa	ata a	aato	caagtg	1121
tgga	gtgo	ca t	aaaa	aaaa	ι											1140

```
<210> 4
<211> 260
<212> DNA
```

<213> Mus musculus

<400> 4

Ile His Arg Ala Phe Pro Glu Gln Ala Leu Leu Arg Arg His Pro Pro 1 5 10 15

Pro Gln Thr Arg Met Leu Ser Asp Leu Val Glu Phe Cys Asp Gln Met
. 20 25 30

Gly Leu Pro Val Asp Phe Ser Ser Ala Gly Ala Leu Asn Met Ala Leu 35 40 45

Tyr Phe Cys Ser Gly Leu Leu Gln Asp Pro Ala Gln Phe Arg His Tyr 50 55 60

Ala Leu Asn Val Pro Leu Tyr Thr His Phe Thr Ser Pro Ile Arg Arg 65 70 75 80

Phe Ala Asp Val Leu Val His Arg Leu Leu Ala Ala Ala Leu Gly Tyr 85 90 95

Arg Glu Arg Leu Asp Met Ala Pro Asp Thr Leu Gln Lys Gln Ala Asp 100 105 110

His Cys Asn Asp Arg Arg Met Ala Ser Lys Arg Val Gln Glu Leu Ser 115 120 125

Thr Ser Leu Phe Phe Ala Val Leu Val Lys Glu Ser Gly Pro Leu Glu 130 135 140

Ser Glu Ala Met Val Met Gly Ile Leu Lys Gln Ala Phe Asp Val Leu 145 150 155 160

Val Leu Arg Tyr Gly Val Gln Lys Arg Ile Tyr Cys Asn Ala Leu Ala 165 170 175

Leu Arg Ser His His Phe Gln Lys Val Gly Lys Lys Pro Glu Leu Thr 180 185 190

Leu Val Trp Glu Pro Glu Asp Met Glu Gln Glu Pro Ala Gln Gln Val 195 200 205

Ile Thr Ile Phe Ser Leu Val Glu Val Leu Gln Ala Glu Ser Thr 210 215 220

Ala Leu Lys Tyr Ser Ala Ile Leu Lys Arg Pro Gly Thr Gln Gly His 225 230 235 240

Leu Gly Pro Glu Lys Glu Glu Glu Ser Asp Gly Glu Pro Glu Asp
245 250 255

Ser Ser Thr Ser 260

<210> 5

<211> 49999

<212> DNA

<213> Mus musculus

<400> 5 gatcaagtcc agaacctcac actgaaaccc aagccttgtg atgttcttag tggtgacatt 60 cttattcacg tagtaaatat tgaatggtat ttgttgcact cagataccat acaaggtatt 120 gaaaatctca gacatttccc catccagaca gaagtccatc tttcctagtt gtagttgtct 180 attctccctt tcccctggct gcatgtttta aatttcttac agtaaaggca tattgcaact 240 taaaagcaaa agtcattttg agacattttc gcctgttttt taataagtag atgagatatt 300 ggagtgcatt tgtaggctga gtgaaagaca gacaaagtga ggaaggagtc acagtttggg 360 agcctggtaa agaaggactc agcctatgag agcaatgagt tcccacagga caagggtcag 420 ctcttctcct accttgacta gaataaaggg aggggctggg aatggggctc agtagaccat 480 gggaaggtga ttcgatgctc cctgtcaggt tccccagggg taaatgtcat tttccctgca 540 ctccagggcc agttctgttc cattctgttc tcctgccaga ctctttttt ttttttaca 600 gtttttttta attaggtatt ttcttcattt acatttcaaa tgctatccca aaagaccccc 660 cataccetec eccecattee ectacceace caeteceact tettggeeet ggtgtteeet 720 tgtactgggg catataaagt ttgcaagacc tatgggcctc tcttcccaat gatggccgac 780 taggtcatct tctgaaacat atgcagctag agacacgagc tctggaggta ctggttagtt 840 catattqttq ttccacctat agggttgcag acacctttag ctccttgagt acttcctcta 900 gctcctccat tgggggccct gtgttccatc caatagctga ctatgagcat ccacttctgt 960 gtttgccagg catcgcatag cctcacaaga gacagctgta tcagggtcct ttcagcaaaa 1020 tcttgctggt gtatgcaatg gtgtcagcat ttggaggctg attatgggat ggatccccgg 1080 gtattcctgc cagactctta agcccggacc agagttttac gtcttcctca tagttcagtg 1140 ccctctaccc agaaaacact ttgccttggt tttcactgtt ctgtttattc ctgttgctta 1200 gtgagatggt gggccccaaa taagcatgtg catccccagc agccacccca atcctatgaa 1260 cttgcatgct gggagttgtg gagtgtctca ggtagccctg ccatgcttcc ccacagagct 1320 gctcttcatt tccttaatga cccctgtgga ctttcatacc attaacctgc cagatgccac 1380 cactgaaaag cttgtattct tcctgggcta ctgtggtcca aagcaagact cccacagtgc 1440 catgtagett aaggettteg etaaaageag tgetaggtge tgtgttteat acetaggeae 1500 cctactaaat acctgagaaa ctccaggagg aagtagcttc aaagcctagt tctgagaatc 1560 agaaattgtt cccataatct ctcctcttag tcactacaag gggcagagcc tagctgtttt 1620 atttcaggac tgtcggtggg acctctgtag caagggaggg atggaaggag ctgctgttcc 1680 atatecetea agteceagtt ttecaetgaa gacaecagee agetagatgg ettecetaag 1740 gtcacatcag aggagcaacg gaactcagtt gtgaagcagt gaagcttgag gatgaaaagc 1800 agaatccaaa atgaaacatt ttcaagatat gaaatgaggt gtttgtttca gtaagcagca 1860 gaaaaggtta tggtgtggag tgtcttttca aggacaaggg gctttatgag ctggcttaca 1920 atggacctgt tcaaaggaag gctggggtac taggttcacc aggcagaagg tatctgtgat 1980 gtttcctgga tccagaattc ccccacccc caccccact gctacttccc acattctcct 2040 tetttetece tecestecte cagtiteett tetgtacaga gagatgagte ceaaacatga 2100 gcctttaatg ggggactttt gggatagcac tggaaatgta aacgaggaaa atacctaata 2160 aaaaatattt aaaaaaaaaa gatgcctcct gccagtcttg aggacagtgg aacactttga 2220 agattatacc tgcttgagta cctttaccca ctgttacggg aacacaattc ctatctcctg 2280 gccacagcta gagtttcggc tccctctagc ccaatggttc tcagccttcc tgatgctgca 2340 accetttgat acagtteete atgttgaggt gacceccaac cataaaatta ttteataget 2400 acttcataac tataactttg gtgctgttat aaaccctaat gttagcaacc aacatacagg 2460 atgtctgata taatcccaaa ggggttgcaa cccacagatt gaaaacccct gatctagatg 2520 ctgtatgtgg caaagatttg gtttcctctg cttccttgtc tttggtttag aagcttacat 2580 agctgtcatc agatcaggat gggaaaggac ctaatctctc ttgagactga aggacaagcc 2640 agtgagtgat aagattgtat agttaattcc agcttcttct ctatgcagac tctaccatgt 2700 gcacaaactg acttagaacc caaacaggct ggctaacttg gaaccagcca acctgtgttg 2760 ctgggcttct aaggcactgg tcctttccca gccactggtg gtcttgacac agcaagagca 2820 agcctgtgag atgaaaggag ctgctgctgg tgggaggcag ccttgccaca gtttcattct 2880 gccctgctgt ctttctcttg ttgtcagtct cattctgtca cctcaggcct cagttgagag 2940 agggcctaat gaaggaggac ccccaaccct gccccctgct tatatgaagc caccccatag 3000 tttctgacta gttagtcaca ggtcattcca taaggaatca gctttccttc catcaagcaa 3060 cctcctgccc tttgctgtcc ccgcctctcc acctctgccc aagtcatttt cagacacttt 3120 gttcttgaca ccttttactg tccttttggc caggatggct gggatggcca ggacggccat 3180 gttggctggg atagccatgt tgaccagact agccttgcct tcatagcttt aagaagcagc 3240 agcaatctgc tgcccccagg caccaccacc actccagaca gcctgctttt gttccagtca 3300 ggaaagtgct tctttctgcc ttccaggctt tttgaactaa aagttctgta tgaggaagcc 3360 cagaggttca gaactcattt cacatctagt tatttaaaat ttaaaattag ctctattagt 3420 agttttttga accaaatatg tctcaatgag ttaatatttt tcagagaata atttttaaaa 3480 agttcatgga ataggacgga ggtccaaagg tttcttcacg cctttatatc tataaattgt 3540 agaaatgagg tataattgta gaaatatatt tgaggtatat tttgattctc atcatctacg 3600 tgtgtgtgtg tgtgcgcgca cacacacatc cacatgaatc cactatatat atatattt 3720 tttttactct gaaccttcag gtatggacct aagagtttgc atgattcttg agtatttccc 3780 acctgattgc ccagettece etggtgtgte aaagtgatge teaaaggetg tgtaeetgag 3840 gctgggacca gcagcactga gtaggtcagg aggggatacc tccttagata atgggtttct 3900 cagccatgtg tcttcagtct gtggagagac tgtgcttaag ctgacattct gaacagtggc 3960 accccacagt atgtgctaga atcctgtgta gagttcagtg tggcctgaat cctgtggtta 4020 tgcaaaggag gcaggacacg atctcctcag gggtactgtc catgtgttcc ctcctcttt 4080 tttttttcta ccttttccat gaaaagccct ttgtcttctg ccactggctc tggttatgga 4140 cttggtgttg atgtgagtac agttttcaga ttggaaatta atgaggtgtt ccattgagag 4200 aagectgact tetaceetgg etggetgete eeaggtttee teeatgtggg tetttgetge 4260 tttctctgtg ggcagctgcc cttggctggc attcttctat tggctttccc cagaggtact 4320 ttcaagactg ctttcccagg ctagaaacta ttctagtaca tgtcagctgt gcctcccaca 4380 agtcccaagc catggtaaag ccagacagcc ttggctgaga agggaagttc gaaaaggctc 4440 tcctttgtat gtttgtgaag aagggatgaa gggcaaaaga ggaagggaaa tcaggtaaag 4500 atgctatgga aaccagcacc taaagtagaa agtttggtag tgtccatgtg ggcattggag 4560 aaaggctgtc ttgacaagaa ggaaacaaag aagcagaggt acctattagg tagaacaggt 4620 gcttctaata agatagtgta ctattagtag gcatgtagcc aggctctggt gaggaatagt 4680 aggcaacata gggtgacaca tggctgctag tcagggctca acaatcagag gggactaagg 4740 aagcaactga tgtgtagagc caagacatgt gggcatgtag gcagaagaac atctaagagc 4800 tttgtacagc ttactgtaaa ggtttgtgca taaaacttag aatgctctga gcactcatca 4860 gattctacag ctgttcttgc tccaactttg tacagcagaa atctgctaat tgtgtagtag 4920 ttaccttcac ttgagtgtca tgtactagga aggaggatgc aggccacagg aggacagata 4980 tcaagacctg agtgtgggga ggagttcatg agctagctca ctgggaggtg taggaatgaa 5040 aagggtggca cacaatgtaa gctgccacca tctgtcagca ggctgaaaac agactgccta 5100 acacacatgt acacaggact gagctgaggg agaactcatt tgggaagaaa attaagaaaa 5160 gaaagaagca tagtgtccac acttcagtct tcatttttct tgagtttcat gtgtttagga 5220 aattgtatct tatatcttgg gtatcctagg ttttgggcta atatccactt atcagtgagt 5280 acatattgtg tgagttcctt tgtgaatgtg ttacctcact caggatgatg ccctccaggt 5340 ccatccattt ggctaggaat ttcataaatt cattcttttt aatagctgag tagtactcca 5400 ttgtgtagat gtaccacatt ttctgtatcc attcctctgt tgaggggcat ctgggttctt 5460 tccagcttct ggctattata aataaggctg ctatgaacat agtggagcat gtgtccttct 5520 taccagttgg ggcatcttct ggatatatgc ccaggagagg tattgctgga tcctccggta 5580 gtactatgtc caattttctg aggaaccgcc agacggattt ccagagtggt tgtacaagcc 5640 tgcaatccca ccaacaatgg aggagtgttc ctatttctcc acatccacgc cagcatctgc 5700 tgtcacctga atttttgatc ttagacattc tgactagtgt gaggtggaat ctcagggttg 5760 ttttgatttg catttccctg atgattaagg atgttgaaca ttttttcagg tgcttctctg 5820 ccattcggta ttcctcaggt gagaattctt tgttcagttc tgagccccat tttttaatgg 5880 ggttatttga ttttctgaag tccaccttct tgagttcttt atatatgttg gatattagtc 5940 ctctatctaa tttaggatag gtaaagatcc tttcccaatc tgttggtggt ctctttgtct 6000 tattgacggt gtcttttgcc ttgcagaaac tttggagttt cattaggtcc catttgtcaa 6060 ttctcgatct tacagcacaa gccattgctg ttctgttcag gaatttttcc cctgtgccca 6120 tatcttcaag gcttttcccc actttctcct ctataagttt cagtgtctct ggttttatgt 6180 gaagttettt gateeattta gatttgaeet agtgtggaea etatgeeeet eettagaagt 6240 gggaacaaaa cacccttgga aggagttaca gagacaaagt ttggagctga gatgaaagga 6300 tggaccatgt agagactgcc ttatccaggg atccacccca taatcagcat ccaaacgctg 6360 acaccattgc atacgctagc aagattttat cgaaaggacc cagatgtagc tgtctcttgt 6420 gagactatgc cggggcctag caaacacaga agtggatgcc cacagtcagc taatggatgg 6480 atcacagggc tcccaatgga ggagctagag aaagtaccca aggagctaaa gggatctgca 6540 accctatagg tggatcaaca ttatgaacta accagtaccc cggagctctt gactctagct 6600 gcatatgtat caaaagatgg cctagtcggc catcactgga aagagaggcc cattggacac 6660 acaaacttta tatgccccag aacaggggaa cgccagggcc aaaaaggggg agtgggcggg 6720 taggggagtg ggggtgggtg ggtatggggg acttttggta tagcattgga aatgtaaatg 6780 ctctagagaa aactttttt tttttttt ttttttttg gttttcaaa acagggtttc 6900 tctgtgtata gtcctggctg tcctggaact cactctgtag accaggccgg cctatgcctc 6960 ccaactgctg ggattaaagg catgcgtcac cactgcccgg ccaggggaaa ctttgagacc 7020 acaagaatga agaggtcaga gccattttcc ttatgaagga ggctgaggct ccattcagga 7080 attgtgggta tgctcggatc tcaagcctgg tcacttggat ggcttcttgt agagaccttt 7140 agetgeatet gtetecaaae tgetteecaa eecetggaae gggetetgaa getgteettg 7200 cctatagcat gcaaggcctt gtgagtacca ggtatgaggc ctgattgcta gagaagacag 7260 gatctcatag agtctcttgc tatttgcaat agggatcatt cttggaataa tccgaaaagt 7320 agagtttaag aaattttgaa gaaaaaaaa tctaatatta cagattccag acttgttata 7380 aaagtgaaca gtagggattg gagagatggt tcagtggtta agagcactga ctgctcttct 7860 ggaggtcctg agttgaattc ccagcaacca catgatagct cacaaccact tgtaatggga 7920 tccgatgccc tcttctggtg tgtctgaaga cagctatagt gtacttgtat taataaaaat 7980 aaataaatct tttttaaaat ttttttaaa ataatgtgaa cagtaactgc tgttctccaa 8040 gtgcccctgt tgtcattttt aaaaagccat agttctttct ttcatggagg gtgatcaatc 8100 acaagggtca ctgcatacat ctaggataga agctgtgtta catagattcg gtgtgtggag 8160 agttgctgag ttcctctctt tccttctttc tcaaaggtat cagccaggcg tcatagtccc 8220 atctcgtgtc tcaggcagct atcctatctt ctcttccctc tttgtgacat tgatgaccat 8280 tcatccaaac aaatggaaac acttcccatg ggccattcag tgcaagtctt ccacgtggcc 8340 ttgctttgtg ctggggaaga gtgtagacct cagctgtctc ttgaattctg ctagggcctg 8400 gtagtctaaa ctgccagaag gcagcaacct ctgcattttg ttcatccatg tggcaccagt 8460 cagtgttgag agagagaga aggagagaga gagagattaa gtacagtctg tctttgcaga 8520 teettgaaga gtggtttgge egeactatea teegttettg caccaaactg agetaegace 8580 atgcccagag catgatcgaa aatccaactg agaagatccc tgaggaagag cttcccccaa 8640 tttctccaga gcacagcgtc gaggaggtgc accaggcagt cctgaacctg cacagcattg 8700 caaagcaact ccgccgccag cgctttgtag atggcgcact ccgtttagat caggtcagtg 8760 agtetetttt gttttatgtg gtettgagtt tggettgtge ecaaaaetea agggtgagaa 8820 atatectggt ggeetettte tetecaceta ttteecetge eeetgeeaca eeatggtaat 8880 atgagttagg gtaagatggt atctgtgtac agagttctgt gactcccagc tgctcttacc 8940 tggaaaacct gtgtccatga ttgaattctc acttgtagat ggcattgctg tgacaggtcc 9000 ctgggacaaa gaagggagga aggacatatt tttggcttgt ggtttcagag gctcttggaa 9060 catagetetg ttgtttetgg eccatagttg ggggeggggg gtggeatgtg agaagtatgt 9120 ggcccagtgg agctgcttgt ctcatggcag ccagtaagca gagagacaga ggcatgtgaa 9180 ggagcagagg caagatagac tttccagggt acacccccag tgatatcaat gaatccaaca 9240 gctggttctt tgagaagata agcaagattg acagaccctt ggtccaagta gccaaaagaa 9300 ataaagaagg cccacattaa cagagtcaga aatgaacagg gaaacattac aacagatgcc 9360 taagaaattc agagtttcat aagggcatac tttaaaaaac tgtactctat tagaaatgga 9420 tgagtttcta gattcagcca aaccaccaaa attaaaccaa aaagaagtca acaacctaaa 9480 cagacccata acaaataaga ttgaaacagt aaaaacaaaa caaaacaaca aaaaacttcc 9540 agctacaaag aaaaatctag ggccagatgg attcacagga aaattttacc agatgttcaa 9600 agaagatttg caccgagttg tccttaaact attcaaaaag tagaggcaga gggagcactc 9660 ccaggtetee tetgtgaage etttatgtea ecagttetet eegeteatgg agattaette 9720 ctctgctcct tgcttcatgc ttggtgtcct gaggctgcag cccaccatcc tgtcatctcc 9780 accaacagtc cctccctgat tccaagaggc taagttgatg ctaatgacac cagaacttgt 9840 gtctgacctt tctccctcac tcaagcctag cttctttacc tgccttatct gcctgactgc 9900 ccttcagcag cacagtggtg ctcactcacc cttccttctg cagaaagcag tgcttgatgc 9960 ccacagcatg gcacacaggc ttcccagcat cctcttctcc cactgataca ctggagcatt 10020 atatatgtgc ccccaaccca agtgtaccag tcgcacagat ttttgtaatt atgcttagac 10080 taaacattag acagacagat catatacaac tctcaaaagg aagctgttta ttctgtaaac 10140 acatccatgt tttagaaaga caagtcttca gaatgtcttt aggaagactg aagtcacttt 10200 acaaatgaac cgtggggctt aggaaagtct ttagaaaatg aattgggttt agttttctca 10260 aaaagactag gaatctatga tgttggcacc tataatctca tctctcagga agccaaaaca 10320 ggaagattga aagttcaagg ccatataaga tgtatgtcaa gatcatgtgg caaggaagaa 10380 gaagaggaag gaggaggagg aaggaaggtg gagagaaagg caataaaaag aataaattta 10500 gttttctctc actctgtagc tcaggttgaa cttgaactca tggctagccc cctgcctcag 10560 cttcccaaat ggtaggatta taggtgtgag ccaccaaacc agatactaac ttgtattctt 10620 taagtettae tttttteaa aaatggttta gaaacatata tetatgtaaa ttaagttata 10680 atacaaaatg ttaggttgta tattatgtat gccttttctg catgattctc ttatttactt 10740 aacttttaca atgaaaaacc agctgttacc caagcccatc aaatgaggaa gtttctgaag 10800 taccatttcc agatgtttcc ccactaagat gctataataa aattcaactg gattaattca 10860 tctgtgaaac tggagggagg gggagaaaat agcggcaact tatctctgtc ccattggaag 10920 aggtgtggtc atcatcgtaa tgaccataga ttattgatgg agaatgagca gttagtatgt 10980 ctgatactca gaattgtatt actgaaaaga ctttagatat ctgtatccca gtgggcctcc 11040 taactcataa atgagaaggc tgaggtcccc acaggtagat gggttgctta ttgccaggca 11100 tccaagtagc tctttgtttg gttttcctcc atttattaca ctatgctgac ataagagaaa 11160 aaagtttgcc tttaaagtga aaggggaaaa caccctcaaa aacctaatta ggttccagtt 11220

aattaaggtt tgaaagtaat gaatttgtat ccttggagtt gatcccttca ttcgccagaa 11280 aacaagtctg tagaccccca cataagatgg agacatcaat ctttgcagcc aaggacactg 11340 gtgaggccgt ttataaatca gctaaatggc tttattcaga agccctgcgt ttgttctccc 11400 gtccctgttg ccttctttgc cctcacaagt tcatttttcc ttggtgcctt ttcagtggcc 11460 tgctgtttgc cattgttctc tgaagctttg tctgccatag ttcactgtgt ccatgttttg 11520 ggtggtagtc ctttaaaaag cacatccttt tatgtcagca gcaattagag atcggtcttc 11580 agccaatcca aaggctttgc ctttcaaaaa aacaagggtt gaagaacccg aaaaagaaca 11640 aagaagaaag cccaagcaac aaaaaggggc ctggttgcaa aagcaaaaaa aaaagcccca 11700 aaaaggcaaa aaggcaaaac aaactgccca accaaaaccg aatttaaaaa aagtttcctc 11760 caaaaggtga ttctcctttg ccccaaaagc aacacaggct tccaaggcta tctagtgatt 11820 tttggtcgct gagttgaatg atgaccette tgagtggett gtetetgaat ceatgtttte 11880 agctaccagg gtagttcaag gacttggtac aaatgaccac tttaattatt tgtttataat 11940 atatgtctct cccgaatctt aaaagaggcc ataatggggc caagacttct gtatctgtag 12000 aagaaaagga atcacagtgg ttcctaatat ccatatactg agtttgatgc aaggggagcc 12060 atctgagggt ttttgctcct gactagcaca ggccagccct cagcagctgc catctagggg 12120 ggaagataga tctgcctggc atgggtgtat ttaaaaccct gaaacccttt tggggttcta 12180 ggtcagctat tgccttcaga aaggatatga tggtaaggta atggggtgcc aaacagatcc 12240 tcaatataag actaacattg gctgatgtca ggaaactcca cgccctgctt tctgaagctc 12300 tctgaacctg tttctcttca gccaggctaa gacttctatg tgaaacaaac tagaagtttg 12360 cagagatcag acaagttctc ccagcaggca gttaaaacta tgaattcgga gggccttgga 12420 agtcaaatga aaaaaacctg agaaaaattc atataaagta aaggaggctt tactaagttc 12480 tcagctctgt catctctgaa acctacttga cacagttttg aggcccaagc tccatgcagt 12540 ttctttgtaa aggtagcctt tctaatggaa gacacttttg aataccctgg gactcaagct 12600 gtgtgagtct gtaatgtttg atcctaacct agcatagcct ttcaatcagt gttggcaggc 12660 tttcccagga aaggccagac agtaaatgac atgagctcct ggtccatatg gtctgtctct 12720 gactcagccc tgcctgttaa tgtgctccaa atgaatgggg gtagttgaag gtcactaaga 12780 cttggatttg atatcatttt cacagaccac aaaatattat tcttcatttg attatttttc 12840 aagtatttaa aaatgtaaaa attettettt geteeeegge catgcaaage aagttaaact 12900 gtgtcccaca catcactgac cctgcttaac tgaccaacaa gcttttcagc cctattaccc 12960 gccaagcctt gagcagctca ttaccacttc cccaggaagc caggctagga aatggagaac 13020 agttgggcta agtgacttct caggatggtt ccatacaatt aagtaaatta ttcttttgat 13080 tagtaccacg cttagggggc cagttggagg ctggaagtaa gagtgactga ccccccaacc 13140 ccagcacagt tcttttgccc ttcccaaggt ccagtccctt tagcttgaag ccaaagagtc 13200 agcactetet ttacteetet geaggaceet eagggteaga geageeetee eteteeeete 13260 ccctagctcc cccttctcct tccctcccct ggtcctctga aggtagagac tactccagga 13320 agagcaggct atgaggaagg tgggtagctt ctctcctggc tacctgtctg cagtgctaat 13380 tacagcagag tgttccttct ctctgccata gatagctgca ttctggatgg ctgctgctca 13440 gtgttgctct ccgatgacat tggtgtagct gtggagaatg ggcaagccct tctggtttcc 13500 tttagcttta gtgtctgtgt caactcaaag tacaacatag tccaaggccc aggctctgag 13560 gtttttcatt cagagagttc ttcactcagc atagcttcag agacctgttt ggggagccca 13620 gtgtgtgtgg agggggtgag aatgtaaatg aggaatgaga agtttcaggt atgggaaggg 13680 aggcagtgaa ccactagaca gtaagaagca ctgggtggaa gtgcttgctg aacttgaaac 13740 tgaggaatga ctcctgccca aaaccagtgc tcatccttag aaccctgaag aaatccatgt 13800 gcctgaagca tactgtctta gttagggttt tactgctgtg aacagacacc atgaccaagg 13860 caagtettat aaaaaacaac atttaattgg ggetggetta caggtteaga ggtteagtee 13920 attatcatca aggtgggagc atggcagtat ccaggcaggc atggcccagg aggcactgag 13980 agttctatgt cttcatccaa aggctgctag tggaaaactg acttccaggc aactagggtg 14040 aggatettat aeteacacee acagtgacae acceatteea accaggteat acctatteea 14100 acaaggccac accttcagat ggtgccactc cctggtccaa ggatatacaa accatcacac 14160 ataccaagag ctttctgtcc tctctgatct tcagaggaca tcatttgtaa ctcctgtctc 14220 tttgtgcctt tcacttcctg taatatgtca caggagtcat ttgtgttgac cgaaaatccc 14280 cacacacaca tacacacaca cacagtaget etgegaetet ttagggtagt gacagtggtt 14400 cagtgggctt ctgctacttc caggccttcc atttaaatgt agacagcaca tggcttcact 14460 tggatattta gcaactcact tatttctcta ctttcctgct tattttcatt tgtagatcca 14520 gctctctgtg acactcagac ctggactctc aggggtagca ggaagggtgg ggagctgcac 14580 ccttcaccac agagaatcag aacacagcct acagtggggt ctggaaacct ttcctttgag 14640 agtgacagat cagtttagtt actgtacatt aatttcatat ggaattacag aaaatagtca 14700 tacttatgca cacatcette ettgttagat gaatttetet gggtggettg ttagtaceat 14760 ctgcgctctc cctatactca ctctccctgt gacacaacat agagccattt ctcccacttc 14820 caaaaacttc agaaaatcct gtttaccttg gaagttgtta tgaatgcaga ctgacacttg 14880 accagtggcc attgctaggt gcctcttgag ttctctctcc aacagcagga acactgctcc 14940 taacactgct cctacagcag tgggaagcag atgtcctacc ctaagactgc ataccaagta 15000 gaggagaaca tatggactta gcaaaggagg ccgaggggat ctcaagcacg atggggagtg 15060 gatgggagtg aagggcaagg acaacctgct caagacagct gtgcccactg atgagcatga 15120 gaagagccag aggcagcttc tcctcctctg agctgaggct gagactggac acttgtgaca 15180 cacggaggtg aaagtggctc tgtctacccc gagatggttt agatgaaagg aggcaaaaaa 15240 gtagccagag atagagccac accetetgce agetggaaca ettgggatge ttececacte 15300 ctccacctct gctattacct tgactgttgg gtgtctttcc aggcaggatg tagtgaggcc 15360 tgaagctgga actgctgcag ttggtcaaca ggcctgttca gaagaacact gagtctgctt 15420 tctaagtaac tctagaaagc aagtttggct cctagcccac ctctagaagc ttttgcttgc 15480 cttctggttc actctgcatg ttgatgtcta gcctcatttc ttccaggcca aaaaaaaaa 15540 cattgcttca tgcctgctgc tatattctct gggttcacct ctctctggac ctgaagaatc 15600 tgaatactga aatcctctgc ttgttccaag tggggctggc tcggccaacc ctctctctca 15660 gggtgccata gcccttcatg cctatctttg tcacactgtc cagttgtctt gttaccccct 15720 ctctacccct gtctcctccc ctaagattca gttcctacag agcaaagacc acatgctatt 15780 gatctttcta tecteaette etgaacagtg etgeatttta acaagetgtt tgtteagggt 15840 ctctaaacag tgccatgcat gctggtcttt ttaaataagg tactgctagc tacagtgggg 15900 agaatggaaa ccaaggctgt agatcagaat gtttgcatga gagagttact atacagtgtg 15960 aaccaaggct gcccaagtaa actggctgtt acttaattct ttgccagggc atccagcatg 16020 tagaagagat gtggtgagga ctttctcagg tggagctgtc ctgataggca tgaggagtca 16080 gaaggettea gtatgettgg ggteategae actteagagg tteecectea gattgggatg 16140 tccctgctgg ggatgtcagg aaggacactc ccaaagttcc accagagaag agagatgctg 16200 gtctaaaaag gcaaaaatta cctcctccca gagctactcc tcttacctct ggaatggggc 16260 agaaacaagt tggataggaa tggcaacctc tagtctttgc aggatcctga gaggactcca 16320 cccctacccc cacctccgtt ttgctcagaa tggaaatggc ggctaccaga taaagacttt 16380 ctattggtct ttggggcttt ttaagaagag aacttaaata caacccaggt tactcaaaca 16440 gaagttgctg accttcccag ggtacagtgg aggggaggaa gggctctcat gctgaccaga 16500 agagacaaga acttctgtga cttaaacagg gcatggctag aaccctcatt tcctcagaga 16560 tgccttttgg gtaattgtac tcagttaggc aaccctggga ctctctttat tcataggaca 16680 tactgcatat tettgeeetg ecceeatgte acaeteaegt caattgaatg taageeagae 16740 agctacataa gaagcatgga atgctttgac gttggtaaaa cctgcattgg agaaagagaa 16800 cccttgcagc tgatccttag atttcaacca tgactgcttc ttgggactgg cccagttgat 16860 ttcagtttgt attcttcagt gcgctcggga ctctgtttcc taggccaaag ctcttctgtt 16920 ctgttcattc tacactgagc tcctgcaaat gttcccttgt ccctcaagaa cctgcgggta 16980 tcacagacca atggcagaaa tgtctggggg acaacataca ggtgttttat tttaccacac 17040 aaggatatat taaaaaaaaa agttagggta gtggtggccc acgcctttaa ttccagcact 17100 tgggaggcag aggcaggtgg atttctcagt ttgaggccag cctggtctac agagtgagtt 17160 ccaggacagc ccaggttata aagagaaacc ttgtctcaga aaaaaaaaa ttactaagct 17220 agggctatat agcttagctg ttaagtgctt acccaacaac atgagacctt gggttcaatt 17280 tgctgcacaa cataaactgt gtagtggcca cacacctgaa atcccagcac tcatgaagta 17340 gaatcaggag aatcagaagt tcaaagccag tttcaaatac agagaatctg agtccagctt 17400 ggagtgcata aaaccctgtc tgggaaagaa aaaaaaaaa aaaaaaagc agtgttcccg 17460 tacacatgaa gcattctatc cccaagacaa aggaaataca cgatgtgaca atatgaagta 17520 ggtttctaat acatttttag ttatttgggg agtgtgaaga tatgcatcac agcacacaaa 17580 tgacgatcat aggacagctt acagcagtca gctttcttct tataccacat gggtccgaag 17640 atggaactcc agttgtcaga cttggccgca ggcgagttta tccactgagc ctctctccgg 17700 ccatgaagca gttactttac gttgactcgc ttgagcttgt tgggagcatg cttaattatt 17760 gctttgctca ctttggttgc ctcagagtag cttgcgagaa ttactagact cacacgttag 17820 acccagatgt cttctgcctt ctgatgagga gcaagcgtgt gagtaaggag gggaagcagg 17880 tcacagtcca agccgctcaa gtctgagctg caaatccttc attgtacaga cggctccgaa 17940 tcagaacact tcctgttgct acagtcagga cggttatagt ttttattgtt ataaatgaca 18000 ttgtaattaa tacccttaca cagaaagtgt aaaagtcact tagaaataca aacatcataa 18060 actactaggt tgaagaaaat tgactttttc tgtgtcaatt cttaagatta actttgatta 18120 ttttattgta aaatgaatat atgttcatac tgtaaacata tttaaataaa caaggaaaaa 18180 gtagccattg gctatgcctc acctagtaat aatacttaat actgttcact tcagagcttt 18240 tggctttctg ggtgttttcc agaaggttgg actaattgag gtttacccca tcagagaaca 18300 gtgctatgct gttactcttc tcagcaaatt cagtttgtgg ctttgcttta atctttgtta 18360 gtgtaagtaa cttggaagtg gtgttccatt gtttgagttg ccttttttcc tcctgtgtct 18420 ctaggactgc caacagcatc agcacaggcc cctgctctga tcaaatacaa ccaccttttt 18540 ccctatgaag atagaattat atacaataaa gtccaccatc tttagtgtat aggtccacaa 18600 gctccacaca taatcatatg tctaccatgg tcaaaataca gaatagttgc ctcacccaat 18660 aagctccaca tgtgcccttc ggtaggcaga ctgtctcact tatcctcagt ccctagtaag 18720 ccacacatga gcacatgcat acagggtaca aaggtcaatt taaggtacca ttcttcaggt 18780 gccctctacc ttgtttgttg aaaccggatc ttttactgag acccagagtc accaattggc 18840 tcgcctatct aacagtaagc tccaagtatc gtcctgtctc ctcctcccca gcactgggat 18900 tacaagcatg tgccaccatg cctggctttt aatgtgggtt ctggagacca aacttagatc 18960 ctcatgcttg catggaaaca tgttccaact gagctatctc cctattctaa tttttgccca 19020 tttcttaggt gggtcttttg gtttcctagt actaagtttt gaggattctt ttgctatttt 19080 aaatagaacc tctaccaagt tgtgtgatac tacaagccat ccagctcatt ctttcatccc 19140 ttgtcttatt ctttctggct cttctttatt ccctttcttt tgaaaagaag tttttaattt 19200 ctgcatgtat acctgcatgc cagaagaagg catcagaact catcatagat ggttgtaagc 19380 caccacgtga ttgctgggaa ttgaatgagg gaccactaga agagcagaca gtgctcttaa 19440 ctgctgagcc atctctctag tcctattcat ttttttttaa acagtcttgc tatgtagctc 19500 agactggccc caaactcaag atcctcctga ctcagcttcc caagtgctga gattacaggc 19560 ttgttcctct aactcctggc atgagaaatc tttaactgac ctagaatcac agattttctt 19620 ctagaagtct tatagcttca gaatttattt ctactttctc tcttccttta taaacacatt 19680 cctaggccca gacatttctt ttggaaaaaa gttccaataa cagaactgga cacacctgag 19740 cagatgtagg gtagagtcag acctgggagt cttgccaggc acagtaccct cctggagcca 19800 tctgcaaaga agttacctca ggagtggctt gtaagcagat cttctctggt tttaaagact 19860 tggcataaaa ctgaaaagtg tatcttttga atcagggagc agaacgataa gagagaaatc 19920 tctcagctct ctagacaaat cctcttgact atcacagagc tgatggtgag cggagccaag 19980 caagactttg tcgattacat gcaaacgccc aagtcagtga ctcactcaat catgctttaa 20040 tctcataact cagtggcttt aaaaattaca gtcaacaagg cagctcgtgg gttacaactg 20100 ccattggaac taggttttct ctgaacagct ggagtgtaat gtggtgggaa gaaagcctgc 20160 tgtgggtgag aggccaaaga ctgtttgcct gggaaggatg tgcaactaac gtttgataaa 20220 aatctgtgaa atgaccaccc tcagccaatc taagtagagg cctgccattt tcatccatgg 20280 gaaagtgcat cacagcaaaa gcattcagaa ggcactggta agacagtggc agtcaccatt 20340 catcagacaa gacagccctg acttcaggaa gtgtcaggag tcagagtatg agtatggaat 20400 attaacagag caggcagaag attccaattc tagtcaagga gggccagtga gagagaacag 20460 tttgggaatg gcttctctga acagatccag gcagatcagt gcagtcattt gctatgttct 20520 aaaatgtgta ggcctctgcc atagctgtgt cacggaggat atataaacag gctgttcttt 20580 gaggacctca ttgggctgtc cccaggcaca aacattttct taatttcaat gtagaagctg 20640 ttacccacag gagagatgga gtaggacttt ggtttcagag ccctatctat agcagctttg 20700 ttgagaccta actggaaagg ctcaagatag gacatcacac aaggcattta gaagcttgta 20760 gcagtcatca gacatcagac cagacctgac aggaagaaac aggtgagtct caagagggtt 20820 catcaggatg ctcacgagtt tctgcctgca cagcatgggc atatggtatt accaggagaa 20880 gccatctatc tgcccatagg ggacaagcag acatcagttg ggtgataggg acatgaaaac 20940 tttctggccc atctttatat ctgttccagt gaaagatgtg tgaggtcctc acccctgaag 21000 gctctatact teceteteet gctagacagt ctagegagae taggaageaa cacagaatet 21060 agatgaggcc tctgtgagct gcccaggtcc ttaggagtgg agtggggcag gacccgttac 21120 aagagtacac cccccgcccc cgcaatgagc ccagttgttc actatggggc cgggaacatc 21180 acccagcagg ccctattggt cctggcctgc tcccctccct ccttacctcc tcactcactc 21240 ttcccagctc gatctttctc gcttgttaga gagagaaaaa aagtgaattc actcccagtc 21300 cttttgaaac ccaatgtgtc agtgatcgat gaggctgtat tctctaactt caaaggagaa 21360 aaactaagta gagtgaatac tggccagggg agttgaaaag tcccagggag taggagacac 21420 aggagtgacc ctgccatcat gaggagcacc ccccatccca cccctgctgg tgccatgcag 21480 aagcacagac aatgccactt tcagtaaatc atgacggatc ctgaatgccc agttttgtcc 21540 tgttttcaat gggctgtggg catattgctt aagatatagc aagccatttg tgctgggttc 21600 ccagctactc aaaggctcga catttgagtg ttctctcaat tgtataatag agcctttgca 21660 tatgtgattt ggggggaggg ttttttcctc cagatttcca tagctaatca tagtagaggt 21720 gacctcaagt gtagtgcaga ccattgtccc tcttcacccc tgcagatctt agcagtgctg 21780 agctttaggg atattcaggc agcacctaat tcaatcacac atctgacccc tgcctctttg 21840 gccactcctc tgaaactcag ttagctccct ggggtctccc accccacaag cctggatcct 21900 caagageett tgtactgagt agaaagtget cagacettee tecaecetat ecagatteee 21960 actececceg cetgaattta ageacagaga atecagtget geagggeeae ttgtteteae 22020 aaggctgcac ttgtggagat gcctgtgtga agcaccctgt agacatccca tgctaaagtc 22080 ttgggaacac agagaaagaa aaccctgggg tcatttaagg gctggtgtgg tcatttactt 22140 aatcatctgt gaccagcaag ggccttgttt tcagtaaagc tcggaagctt ccttggctct 22200 ttatcaatca taacaaacag ctagaattta ttgagagcct tctctttgcc aagtgcttct 22260 acttgctaac tttaacttcc tccaccctca agccctctac ccatttttac agatgaggaa 22320 actgatgctc aaggttgagg agttgtcaaa gagtacacac tggccaggat tacggaacca 22380 tottotgoca otactgoott totottgttg gatatggacg otgtggtttt atactotaca 22440 cagtttaaaa atggtcgaag ttctcaattt agggcaactt tgaaaggcta aagtgctgtg 22500 tgagtatagt ttttataatg acaaaattcc agaagaggag actaagtgaa tagttgctgg 22560

atgtcagagc taatgttgct aggagggagg cccatgtcct gggaccgtct ggtctgtctc 22620 aggggcagtg gcaactgtga ggatccaacc atgtgtgcag agtggcccca atatggacac 22680 attgtgacaa tttcctgagc tataaccatg taagatgtaa cctttggtgg taattgagtg 22740 atagggacat gaaaactttc tggcttatta ttgttgtttg tttgtttcta ttaattctct 22800 taagtacctc agaaaaaaag tgctacttaa ttccattgtg tcaagatgac ccagtctcag 22860 atcaagagcc acattctgcc caagcagttc acaccatgca atttcaggac ctaggaggga 22920 acagtgtcta gcagagagac cagattttaa tgccagtcag atgtaagctg agactctctt 22980 tecettttta tggaagtgtt aaactaaggg ttggatgttt ataccccaat etcagggetg 23040 tagttaggga cccagagcaa gtttctcaaa ttctgtaacc ttttcagttc ctagctgtca 23100 ggtagctatg tgaactgtac ccatctctag aagccagtaa gagaatccag tagaacctga 23160 tggcctaaaa ttgatgtcca ggtcttacag agtaaagaga gagagctgac ttcagcaaat 23220 tgtcctctga tatctacaca tgtgtgtacc tgaaaacaca catcccacta ataaaatata 23280 ttaatgtaaa caaaaaaatt aaaacttttt taataaaaga agaggatcta gcgagaacac 23340 atcctgccaa aaaacaaaaa aaatttttt ttaagttaca ggtagtggtg aactgcctaa 23400 aatgagtgct gagaactaaa cttgggtcct ctggacaaac agcaaattct cttaacccct 23460 gagccatctc tccagtccta gccttaccac actcgtcaca gaaagatatg ttgagctcac 23520 tctagacgac ttattgctag catgagtatc tgtctagtcc catgtctaat cttcatgatg 23580 taatcagacc tacccagcag atagcaaggc agcagtaaat gctctttttt atttttctg 23640 gacttggtca tttatttctt cactgttatt actttactga agatttgggc tggcactggt 23700 gataaactga taggtatacc caggtggtct ctgcctgtat ttgtttctcc tctattgcta 23760 tgacaaaacg ccatgaccaa gacaacttaa aaaaaaagaa agcatttaat tgggcttatg 23820 gtttcagggg gctccagtcc ctgacgatgg agcaaaggca tagcatcagc aacaagtaag 23880 aattcacatc ttgatccata agcacaaggc agagagcaca ctgggaatag caccagtctt 23940 ttgaaacttc aaaacctgcc tccagtgaca taccccttcc aacaggccac accccaatcc 24000 ttcccaagcc atttcaccaa ccattcaaaa tatattcaca atatatgagc ctcatggtgt 24060 tctcattacc tgagaccact aaagggcttc gtatttccta tcacatggaa tcctcccatc 24120 atgtctttta taacttagag taggcctatt ccatgtagac tcctctacca gatccatctc 24180 ggagetecag caatgeagte atgtgactga gegtetetge cageetttge tetgaactge 24240 acattetgee tecacagtga ecagagetge agacaatgta taettaggte catgecetaa 24300 acaatagatc ctagacacag aagtcctcag cccatttctt cagagaagag cagtagctcc 24360 tatgttaatc ttagtagcag tggtggttgt tgttttttct tggttcctgt cagtcagtat 24420 tttgaccagc tgactaacat ttcttatttc agccttttgc atcctctgag agtaagatcc 24480 tettggette agttetggte tetttaetga tittgagtae aactgageea tgttagetgg 24540 aaggcagaca ttgaatggaa aagtagagct agcatgcctg tctctctcac tcattgtacc 24600 cacctctgac agggtatgta agggtacccg tccctcaacc cagcctcagt cagcccatga 24660 ctctggatgg gccagtgtgg ttagccattc atgggggttg catgtcttaa ataaaagggc 24720 atggaaggaa gcctctttgc ctatgatcct caacaaggtt cacatctgaa tgccatttgc 24780 tgttctctgt ctgcttgaac ctagagaagg agaggttgta gcatggggct cttacatggg 24840 agatagcaag tgggaaatgc agactttaga gccaggcagg tttgcatcta tatgccagtt 24900 gaccaagtgc tgatttgcct tattttagcc aaattactat acctacccta gcatccatcc 24960 tgaactcctt taaatagtgg caatggtaac tgggcgtgtg accctcttgg caacattcca 25020 gctgcacaag gagcctgtga ctcctgcttc tccttttagg gctttatctg atcttgtcct 25080 ttgtgtgtgt gtgtgtgt gtgtgtgtg gtgtgtgt gtgtgtgtaa tctttgtggg 25140 gcttacccaa agttgggtaa gtccaaagtt gggacttctg tattagaact aggatggttg 25200 ggacaagata atagctgagc agatacacag tggatatagt gaacagaact gtatacttgc 25260 atttggactg cctaagccag tctagcaggt tgttgtggct gcttccctgc ccaatcacca 25320 atagacaagt ctactggagc caaggtctga ctgggcttct acctggcaag acacatctgc 25380 caacccagca tggccgtctt aggttgtttg tttggggatt tgaggaaggg gtgagagttt 25440 atttggctat ttgcttattt ggttaattta ttagtattct tgtttggttg attgttgttg 25500 ttgttgtttt tgaaacaagg ttttactgtg tagcccaggc tggcctcaaa ctctcctgct 25560 tcagtctcca gagtgccaga gttagatgca tgtaatccca tcactagtgg aagccttact 25620 tttgaagagt gtagctcagt tagaggtatg taatgccata ggctgaagca gccctagaga 25680 ccagtcacca agggagaagg ttggggctac catgtgacag aggagctgtg tcagcctggc 25740 cacctgtgca gtggtgtaag tactacaaga ctccactgaa atctgaggcc caggtctgct 25800 gttatgtttc ccagggaggc atgcagagaa aaagtggttt ccctaatact gctcaagttt 25860 aaaacaaaca aacaaacaaa caaaaaacat ggtggtactt gcctttcata ccagtactca 25920 gacagcagag gtaggtgaat ctctgtaagt tcaaagctag cactatgttc aaggcctgcc 25980 agggctgcat agtgagaccc tgtctaaaaa agaaaaatga aactgaaccc tgaagttgta 26040 gaaactgctc agatttcagt gagttctttt ggactaactg aatgagcttg ttccagcgcc 26100 ttattttttc tcatgtggag ctggcacatg agcaagacta tccccaggct ttgccactac 26160 aggatcacca-ttgtggatag gtcatactgt tggtctgtga ttttcctcac ttaattttca 26220 caacaatctc agaagtgctg tcattatctc ctataattct tcagagtcag aaaatgaggt 26280 acaaagaggt aaaagaagga agatcaccta actattagga agtaaaactg ggatccaaag 26340 atgggtgacc ttttcttcta gtgtaatttg ccttctgacg ttgtaaggcc agggcacagc 26400 aaaggagaca gaagcagaag tgtgagccct tagaatgcta aaaagaaaaa gaaagttaga 26460 gtggggaaag atctagacta gaacagttag acttggtctg tcttctgaat tctagctttg 26520 gagcccccgc aaagactgca tgttatatac agcatagagt taaaaggagc acaggtttct 26580 gcttaagaaa gaatgtgagc ttacttcatt aacattcaat agtatatata gcttcttttt 26640 atatttcaca cttatttatc ttgtgtgcat gtatatgtga gtatatacac atgccaactg 26700 cacacatgtg gagatcaaag agcagtttat ggaaatcagt teteteetee taccatgtaa 26760 gaccetggga teaaagteag ateateagge ateageagga geettetege tggteteeat 26820 atgcagtttc ctaaagaaca aggttatcca agggctctct caccacaggt gatcacagtt 26880 acatcacagt tagcaaggcc agaagaatgc aaagaatgtc tttatttcct tcctggagcc 26940 tggctcctgc cctcctaaac ttcttaaatt ttgtttaata tttacatctc ttctaagatg 27000 taagtacttg tgatgtcttt aaatttcaca acacccatgt gttccctggt ttacactaca 27060 agtagggcag catctcttaa ataatgttgt tctagaagga agagagctca gatacaagta 27120 gcaacctgga taggaatagc aattccagct attggatact cactggatat agttctaaac 27180 agtctaatca gcagttgtgt gatcagtggg cacttagggc tgaatggtag aagagtagct 27240 ctcatgccag gaaatgcacc aaactcacca gagcaagcac agacaatgga ggagagacag 27300 gtggcttgcc ccaagacccc ccaggagcct aagatggcaa tattgtcgtt ttgaatacat 27360 tgtgcaggca cttggcctct gggagggagg aaaacaatta gcttagcatc aaatcatgaa 27420 ctctgacaac tgctctatct tatataagat ctccttacat aaggatgcag agagagcatc 27480 ctcattaaaa cacctcaagg ggttcatact gattttctag aagcagagct tctctcccaa 27540 caaatacatc aggactggct atagacactt ttttcttcaa taggctaaaa agatcccaca 27600 ttcctccagg agacaaacct cagaacagcc acagaggaac tgggctccat ggtataggtg 27660 gggcatctaa ggtcccagag cccacctcca tccagactca gggagagaac aggcaagcca 27720 aatctgctgg ctctcaattt ggtttacata actcctgact cctcaagtcc ctggaaactg 27780 aggccaattc cctggaagat cattctgttc tctcctgttt tttcaagaag agagccagcc 27840 tgatcactgg ctccgaagac tgtgtgagag tgtcccactt ccttcttcca cgaactgagt 27900 gtctgccgtc atggctgttg tttaggaagg ttctgtttga actctcataa ctccatatat 27960 gttgaccttg tattataaag aactttactt atcttatgtg taccctcctc tgtttccaaa 28020 agaaaatgga ggacttgcag caaaggaaat aagtaaggtg aatacattag gagaagtgag 28080 agactgggaa gggaggcaga cagaaggtga gctcccagta tctgtgtgca gagtaggcac 28140 cagactetet actgeagtat egeaacagea gaageaatee taceteagag agttgagggg 28200 gaaggtaaga aggcacattt ttttttaaaa taacaaactt gactgaaagt tgaaagatgt 28260 gttcctagta ctaagaacag tttctcatgt gaggttgcct ttaggggcac tgcatacact 28320 tgtagcaatg aaaaaagatg tttataggct ctgtcttaag gtaaacttgg tgagaatgga 28380 gggtaactaa aacaacttaa ggaaggccat gagtctgggg agcactagct cttttggagc 28440 ctcagtgtgt cctgggtaaa gttggagcat ccttgtggtg gcagctcgat tggtgcacta 28500 agtgcaaatg tgcaccaagt tctggactca ctcttctcgg acacatagac tgagtgtggc 28560 tcatatctgt aatcacagca ctcaagaggt ggaagtagaa ggatcagaag cacaagatgg 28620 aacaacctca gctctataga cagtttaagg ctatcctggg ctacctgaga ccctgtctat 28680 aagcaaatga ctaaacaaac agacaacaca cttaattttt ttatagcaac cactttgaag 28740 tgggagggt ctgatagggt ctctattgtt cacagcaagt gcacaaggtc aagagtagct 28800 aggcagatga agaagaggcc aagacacctg aacagtatct ttcccatggg ttcggaggag 28860 ccacgtgcca ccttcacagt cagcattgtc tgtgcgagta gctctggcag catcagtgcc 28920 caaacaacgg ctgatacgag tccccagatg caagaggaaa tagttgtctg taattgcctg 28980 ttttaagtag agtggtcagg aggctacagc ctcctcatcg ggctacatgt ggcatatgca 29040 ggcttgctca tcagaccttg tatttactgt tttcacctta atggagaatg ggagaggcaa 29100 acaaagccca gggactttgt ggaagctgac tagaagcctc tgggactcca gggactgcca 29160 atctgctaaa gaagaagcta agaaagaaaa tgagctcctc tgcatgggtc tccccatgat 29220 ggaaacagaa ggccacatgg cacagtgtaa atagagccct gctgcactgc tcttactgtg 29280 gtgaatgaag aagaggcaac tagccaggag ggcaggacca ctactactgt tttgctggct 29340 ggttcctccc aagtgagcag ccttccctgg ggacagacct tagctctaag acagacgtgg 29400 cttcttcgga gcaagtcaaa cctcaacatc gaagaatcct tgtcttgtca gttttagctt 29460 taacaagaat agaacaagct tctggaacag gacacagtgg agtcaggaga agcggcctta 29520 agtgaagaca cagctgtggg gtttccagac tcgcactgca gggaggcgtc atccagtggg 29580 agcggccagc ctcgctgtag acttccaaca ctaacgaatc gggaactcca tgctgaacag 29640 gatttagtta gagggtccct gtgccagcag atggatgtat ttttcttgaa agaccaaggt 29700 gccagaactc ttcatgatta cgttactgga gcaaggtcct tttttgtggt ttgtgaagtt 29760 gagcgtcagg actgcaggat tctcttgctc tttcttactc ttattttttc caggtcagaa 29820 ccagagcttg gagcagggag gaaaatcctg ctgaatgagc aagttctttc ttaaaaagct 29880 cttcaagtcc aaaaagactt cagtggactt aggagaaaga aatttaatac attgccatag 29940 aatcgttgtt aaccaagtta aagcaaagcc cacagcatct ttgtcttata aaagaaagca 30000 aagaggagat ggaaaaaaag aaataatgct taggaaatcc aaaccaaaca atgaagacta 30060 acgaaggaaa actaaagatc acttcaaaga atgtgaagat tccctcctaa taagattttt 30120

caattttcaa acctaagctt caggtgggag gaccttttca gtttttttt ttttcaagta 30180 tgctgttaag tggcattccc caaaatgttg gccctgtgta ggattggctg ccttccacat 30240 aaggagcagt cagataccct gcaagaccca ggaactgagg gagctttaac catgggaagc 30300 tgagaggett gecagaetge teettgaeet gagettgaae etgagteeta aetgetagea 30360 aactgaaaca agcccagcct ccaggagaag aaagtgggcg gaactagagc agtcctagcc 30420 agaaaactat gctcctttca ccactggctc tgtctttaca tccctgggag ggaagcctgg 30480 gttgggcttc aagatcgcct gctcagacca tccctctcac ttgctagccc cttccaggcc 30540 cacgcagagg cactagtgcc tatgagaggt cagtttgcat ctgttgtgga caagacaggg 30600 aattoottga catttttaat atttatttat otttgttagt gtgtatgtat acacacaca 30660 acacacaca acacacatat atgcacaaat gtaccaacaa aaagttatgg agcttgtggg 30720 gggagtcagt ttttttcctt tcaccatgag gattcccaga attgaactca ggtcatcaga 30780 ctagaagcaa gcatcctcac caactcagcc ttctcactat accttgcata gagtttctca 30840 attatatgta agcacaccag acacaccaga agagggcatc ttatgtcatt acagatggtt 30960 gtgagccacc atgtggttgc tgggatttga actcaggtcc tttggaagtg ctcttaacca 31020 ctgagccatc tctccagccc cagactggta gtttttaaaa gcaccagaag ttctgagctt 31080 ccatcttcct tactcagtga gtttaagaag cacctgccta ggcatgatat tctccagggc 31140 aggccatttg ggcaggccat tctgtacatc tgagcctgtg aaagactggc ttgttcattg 31200 accccaagag acacctggct gcacactgac caccctttcc tgtttcattc tgtcaccttc 31260 tgttgcttat tcttatgaac gcatttgaat ccactgactt cactgggctg ggatccaaag 31320 taaggccacg tgccttttac tcatcataga aaacaactat aggcctccta gcctcctgct 31380 tagccttgga cattcattct ctccctagtt ttgctcacaa catggtagaa tctgagaccc 31440 aaaaggacgc cctttatttc ctcagccaac tagtagtgtg gttcctggga ggagacactg 31500 ctggtctccc ttgccactat agtaaaaccc aagaggtgca acaacccccg aagagcttgc 31560 ttcctacctt ccccaaatcc gtgggaaagt ttgccatcct gtcccaaggg tttcagcctt 31620 tatttaactc agccttagtc ctatggccag atgccttgtt cacccctatc atggagcctg 31680 gacagtgaag ggccccatca gaagttttat gttctgctgc ccacagctgc tctcctgtgt 31740 ggtctcagcc taagtttcta gaaataaaaa gctctctcac tctcacacat gttcattctc 31800 tetetetete tetetetete tetetetete tetetetete tetetetete tetetetete 31860 tectteette etteetteet tetteette eteteetee ttecaactee tteceteett 31920 cctttctttt atttcttttt gtgaagcaga gtctctttat gtagaccagg ctggcctcgg 31980 attcataaga gatctgcctg tctttgcttc ccgagtgctg gaattaaagg tgtgtacaac 32040 cacactcaga actcttccat ttctacctaa agaagacctg tttgtccttt gtcaagctga 32100 gageettteg tetecetagg teeettteaa aactttatte etgtggeaat ggeetagaag 32160 ccaatccctt tgagaggacc cactagcagt cagtgcttct gttccatgta gcagctgcca 32220 ccagagtggc ttccattcct gctggctgac ttcccactga ggggggccta cagagcttcg 32280 tatgtgcccc aggctggcag agagggcagc aaggaaggct ctgttctggc aaggcttatg 32340 gtataggaag tatctaggaa atactgttgc tcttcagggt gctgacaaga taggagctct 32400 ttcttgcttc ccggggattt ggacccctag tttcagtaga gctggtcttt gttgactgtc 32460 tctgcctgga tgtcctctgc tgtaggtctt ttgttctgct tctcttggga attcttctgc 32520 ttgctttctg gctggaggta ctggtacagc tgcactagcc tctatactca ttgtacacac 32580 tecectaget tgtgggeete agttgagtea cacatecett catgagetgg acactgeeag 32640 catggatatc tgttcagcaa ctaaaaggat aggcctccct tagcactgtc aggtccaatc 32700 tttctctaga gattgggtct gcttttccct gcagcccctg gatggcacat cattagaaag 32760 aaggacatgc cttccagtgc tgcctctgtt tctgcttaca gggataagta tgtttattca 32820 ttcatactga actttgtact tgtaggcacc tccatgcctg tagacatgcc tgatggcttg 32880 acttctctga gaaacacatc actgtcctag gtagatttta gaacttaaga gaatggtacc 32940 caccttgtcc catccctacc tctccactcc ttggcttttc tttgaatatt ttaattacct 33000 gtccatccta aggtcacaca cagtctaatg tctggacaca gttcctccca cctctctaga 33060 gtccataaat acctaggaag ccagtacagc tttacaaaga agactgcttc ttctgactgg 33120 cccttatggg cctaatacat accaaatctc tcaaacacag tgtagtgtga gaatctaata 33180 agatcatatg aagaatgttt agagcagatg tacttcataa atattagttt cctacagaac 33240 gtctgtcact cagaccctct gctttctctc agttgggctg catttctctc tcatgtctgt 33300 cagtacttag ttccctggcc cgtctgtatc catctgttgt catatcgtat tgccctccct 33360 tgcccattat tcatccctca aacctttctg gaaagatcca gctttggacc agcttggctt 33420 tettetteat actactgtea aggetgeaga gggttgttea etaateetag etaetgagtg 33480 ctctttggtg gtcctcctgc gtggccccat ctaggtcttc gtcttgtcct ccaaagattt 33540 gactgcaacc ttcatccttt cctcaaattt ctaatctctc aaactctcca ttctttgcag 33600 ataatttgac tttctagttc tcaggaggac agaagccatg ctagaaagtt ctaaaccctc 33660 cttacctggc ctacagacct ggctctgtcc ctgctcaccc ctcccatctc tagagaaggt 33720 cttccattgt gtgttggatt ccagtccctg gccatctcag aagcaacact gtttactcca 33780 tctcttgggc tccctctcct actatagtca attctgcttt aaaatgtcac tacttatatg 33840 tacacettte actecettae teactgtget gteceaetgt agtetetget gteteeteee 33900 tacagccatc taaagccact ttgacctctg tttccttgct tctcactttc caatctgtct 33960 cctacccacc tcagctccca ctactacttc cctccagccc tttctgccag atccagtggg 34020 gtccctgttt gggacacaca ctcctctct atgtggcatt ttaggagggt ataacaaact 34080 gacttggctc ttccttcctt aagaattccc ccttagcttc ttcaagacat aaatcaagac 34140 ccacagccac ccttcttggt ctctgctccc agatctctca tggaggtgtt ctttggactc 34200 cactaggate ttetteetee catgeactet etcaagaega teteaceeae tgeagetage 34260 tctcatcttg ccagttgaag cctgcacatt cacttggacc acacatacag cagccttctg 34320 gccatcccca ccaaaaacaa agaaaccaac agctccaaat aggacccaaa ctcaccgccc 34380 aagcttacca tcccgcatca cctgcaggag tggcctcacc atctgtccca ccatctgaag 34440 cagagaaact gtgacacctc cattcccctg catatccaga ccagcaaagt tccataatgt 34500 tcttagcaat ggacaaagag agtgagtttg agttaaaact ctagttctat tgtgctgtgg 34560 catgtgtgtt tgtgtatatg tgggtatatg tgtacgtata gagatgttct tgtatgtgga 34680 agccaaacaa cctcaggggt agttcctcag gtgttgtcca ctgcttctcg ttgttattgt 34740 ctctcactgt tctgggttta agaaagctag actggctggc tactgagtcc caggatctgc 34800 ttatctctgc ctccccaaca ctattacagg catgctcaca gatgcacatc atacctagct 34860 tttaaaaaca tgaatttggg gaatcaaatt caggtctttt tgcttgaatg gcaagtactt 34920 taccgactaa gctatctcct taacctctct caactgagct atctccaaag gcatacagac 34980 acacacacac ctctcaacag gatctcaata tgtagcctag gttgtcctaa aaactctaac 35040 ccttctgtct cagaatcttg agtacaaaaa ctgtgggtgt tcattactga actcagttaa 35100 attettaate titateagee ceaagetetg catecattaa atggaaatta taacaeetaa 35160 ttcaagtggt catcaggata aaggaaagcc ttcttcactt ggtgtgtgtt tgataataaa 35220 agtatttaaa taaataaata ttcaataact gagtgcccct ctgtccctct ctccaccaat 35280 cggacttgtc ttgttgttaa attgctgttt ctatagtttt ctgaccttga agccctcccc 35340 ctcaagatca cacttaccag tgttttcctg actgaggacc acagtgcctg tttcatccct 35400 ccttttttta cttttggggc taggaggcag attctagagt ccccattaca gggtttgatg 35460 tgtcttctct ctaagctgtc tctagatgcc cccatctcca caaccctgcc tgagacccag 35520 gcctaatctt tttagtctgc catgatggcc ttgcccaaag cccttctcct gcaggcttgc 35580 cttcagttta gcccatctct cgctgaccac caggtgtctt gtcctctgac acctgctgtg 35640 cttctttctt tctttctttc ttttttcttt ctttctttct ttctttcttt cttttcttt 35760 ctttttacca tgtgaattcc tcatactctt acatgcagct tgctgcatta gctcagccct 35820 cctgcctccc tgaagcagcc tgatatcgtc ctccttgatc tcattcctcc cccccccat 35880 gttcctctcc ccccccccc tccacgatac agaggaggaa agcatttggg agtggttgag 35940 aaactgaatc tcggtacagc gaccagtagg atagactgag acattcagca aagaccaact 36000 ctactgaacc caggagccaa aaactctgca aaacaagaaa aatgtaacac aagagtgggg 36060 gcatgctagt ctttactcaa aatcaaagta gagctacctt gtctcgaaga atctagaaaa 36120 tgccaataaa gtggagaatc ctcccactgg gctgtttctc tctctctct tctctctctc 36180 tetetetete tetetetete tetetetete teteacacae acacacaca acacacaca 36240 gttttggttt ggttttggttt ggtttttgtt tttcgagaca gggtttctat gtatagccct 36360 gactgtcctg gaactcactt tgtagaccag gctggccttg aactcagaaa tccgcctgcc 36420 tctgcctcct gagtgctggg attaaaggca tgcgccacca ccacccgctc tctcccaacc 36480 ttttgttgat ctatttttt gtggtttcct tagcatgcga tcaaatgtat gagctgcttt 36540 atctgcccac cccaccatgg ctacctgctc tcccacatgg actgcagtgg gacctgtcat 36600 gcttcctgac ttttgctacc aatgctggtc ttattaccaa tgcagtagtg atactgaggc 36660 aaactgtttg gcagtgaaac ctttctctaa gccacaaatc catagcttaa aatattgagg 36720 cagaagatgc aaaattttct aagagtgtag gtttttctgt ttgttcattt gtttttagtg 36780 gacaaaatca atacactgcc tcagctagaa agaaagaagt gaggcaaaag gtcatagttg 36840 gttttttttt ttttttttt tgctttgttt ggggatgttt ccttttgaca cagaatctca 36960 ggaggtagcc caggatggcc ctgaacttta aaccttctgc ctcagcatcc taaatgctag 37020 aaccaaacac atgtacaacc acacctatct acttatgtac taattatacc aaataatgga 37080 tttgcgttgc cctttctata cacgtgtact tatacttcga tggtcatgcc catcactgtg 37140 tettgtteee acteceetgg ceetteeaaa atagtteete teeteteete tetettttte 37200 atctagattc catgcatgag acagaatata tttgtcagtc taggtccaac ttatttcaca 37260 taacaaatgt caaattttca aatgacaatt ttttaattct tgtttcttat ttcattttcc 37320 tgtgcttata catgtgtggt gcatgtttgg tgggtgtgtg catgcagagg cttggcagtc 37380 acceteaget gettttecae gtttetetet gaggeaeagt eteceateae gteeaggget 37440 cactagtatg gcgagtcttt caagccggct tgcactagag atcccctctt tcctctctgg 37500 gataggaatt ctcggcatgt gtgtgagttc tggggagcca cctctggtcc tcatacttat 37560 gcaaaaagtg ttttaaccac ttggcattct ccccagctct cattcctttt tattgctgaa 37620 taaaactcca ctgtgcgtat gtaccacatt ttctgtatcc cttcttccct tgatgggatc 37680 tagactggtt ctgtagaagt gccatgaaaa ctgctttggt acagatcgat gtctgtgttg 37740 tgctgacttt gtactccctt cagacagatg tccagaggtg gtagaactgg atcataggat 37800 agtgctattt tetetetete tetetetete tetetetete tetetetete tetetetete 37860 ttggagaagc ctccacactg atttccatag tagctgaact aaattctttt taatttaact 37980 gaaatagagg cctgcttaga gccaaggtat aatctgtaag aaaagccttt gactccagtg 38040 aagttoctgg ctttgttgtg gtaaagaagc atttgtttct agtttgagtg ttcatctggg 38100 tcagtaagag gacagaccat tcccaagagt gtgctttgct ctgagggaga gaaaaattgt 38160 ccagtatcta atggtgcaaa tcattagttg tgttaataac cctacagggg aaaaaatcat 38220 aataacgtat ccccctttca tgtacttaat gtagctaaat tttccctaat gagttaaaag 38280 tccatggaat ttttggagat agtaattggc tccacattgg aaatgctcaa gctccctgag 38340 ccctgggctc cagtaagaca ggtagtaaac ctgcctgagc cctatgaagc cctgtgttca 38400 cctgaggtct ccttgccaga gtcccaaaag aaaccaggac tcagcaggtt gtcttttcat 38460 cttcacttac agggtcgcca agtcagtgtg ctcctaacct aattctgaac tcccttcttt 38520 ccccacagt gtaatattta cctaactggt tgttcaaatc aaaccttgaa ccttggttct 38580 cctttgtcac catatccatc agctgttgat tctacttcta aaactcactg ccacttagat 38640 ctcccgagtg tccatttctc ttcatcctgc ctacctgccc tctggtctcc actcccattc 38700 ccttaggaac agccctgtgt aggctcccat ttctctcctc ttccttcaga cagcacagta 38760 gccagctaaa agggtcttcc caaactgaac tgtggtgaca tcatccaccc ctttcttaga 38820 gcagatcacg atcetteett tgtagttaaa gcaaaggtea gagteeaata tageeaagag 38880 tgccatgcat attttgcctg gccttccttc cacagtgaac cacccactgt gatccttgta 38940 gctattggac ccagcttctg gccatccttc agttcctgca gctcctgctc aggacctgtg 39000 tatatgctgt gacttctgcc caagacaact gtctgttccc tcacctgtgg gctcatcacc 39060 cctccttccc acagccctgt tctgcctggg tcagctcatt tgcttctcta gaaacatggt 39120 aagttacatt ttgcctccca taaagattcc aagaaccctc ttcagttcaa acttctacat 39180 atacctggct gttccctaca atagaggttt gctcttgtga cagacagcag gctccacaaa 39240 ggtgacccca ctgctgtagt gctcctgtgt cctctgctag ctcagaggca ggtataaatg 39300 tgctttccga gtacgaatta catggccagt gcataagatg cccctggtgg cagtacctgt 39360 ggatggcaga gctccagtga caggactctg ccacagtgag aggttggcgt ttccacagca 39420 catccactgc agggagctga cttgtttgat tctccctccg ttgagcccaa actcactggt 39480 ttttcttttc tctttgttta gctgaagctt gcttttactc tggaccatga gactggattg 39540 cctcaaggat gtcacatcta tgagtaccga gacagcaaca agtaagccac tcactcaggg 39600 gaaagcatcg cctacttgct gagcagctgg ggcaggcttt ctgactcggg cttcccttac 39660 aggggtgctc aacatttttg ctacatgtga gaaaatgtct ggcacacaca tacaaaatat 39720 ccaccccaaa agtctctttt gaccttaaat ataatagaaa ggaacttgta tagagggcta 39780 gagcaatggc tcaaagcacg tactgtgaaa gtgtaaggac ctgagtttta acccccagaa 39840 cccacataaa gccaggttca atagcacaag tctgtaaccc cagtattcct acggtgaaat 39900 gtgagaaaga gagaagagag teettgaagg teagatagee tggtataeag aaageeeetg 39960 tgccaaacac tgtggaaggt gagaaccaca ttgaagttat cctctgattc catatttctt 40020 catggcacac actcatgaac atttgcacat aaatgtgtgt gtgtcacacc atacatatac 40080 aatcatacac gcatgcatgg aaataaagca ggtgtaaaag agttggttaa gagtaagaag 40140 tgtgttagga aaccagccct ccttttcagg ccccaccctc ctccccaccc ctccccagta 40200 ctcgcccctt gcctgcttat ctgagtcagc tgtgactttg gccttggttg tggttctgta 40260 gccaccgact ccccacttac tacttctgta gtgatcctgt ggctgtgtag ttgggaggtg 40320 gacacagatg caaagtagtg tagccctgtt agaaaatggc cccagcataa ttttaaagta 40380 ggacagtggt ggtgagtgag gcagaagaaa tatgccttga taatgctggt gctggtggtg 40500 gtagtagtgg tgatggtggt ggtggggtga tggtggtggt gatgatggtg atggtggcag 40560 cageteacat ttgggeacet getetgeatt agaeteatgg gaaceagtgt gtgeeattee 40620 tacttaaccc tcatcacagc ctgaagagtg ctttcattac tatgcactgc agaagctaag 40680 gcctagggaa ctctgccagc tcactctaag taatttacat acacagtcaa ctttaacatg 40740 tctacagtgg aggaagacta ggtggaagac agttgttacc actctgggaa accatcctca 40800 ataaccagta gacccagcct agacttgaga acagtgtgtt ctggtatcat catataacta 40860 tctaaactat gtaatctcac ccagctgaag gaataggcac ctgccagcat agccagccat 40920 gacctcccag aagaactcac tgctcagatg tgagtagaag ataggtcagt gttacccttg 40980 tgaccacatc cacatgcagg ttgccttctg ggtatcattg caatgtctgt atctttaggc 41040 agatgatgta cttattattg gacaacacta attcccactt catgaaccat ggagaaggcc 41100 atccagtcat cctcaatgcc tctatctccc atcttgtatg gggctacatc tagaaggcat 41160 cccagtgctt ctaaagccat tgtgtcaaaa ataccatctt ggtttcttat taagctcagg 41220 tcatcagcaa agtcaatctg ggattctctg aagccaaagg caagatggga gaactgaaca 41280 gattcctgag tggctgggca agctttctta gagactaagc acataaccca taaacagtac 41340 agcataccgt totgottoco ttocottgot coacactgtt otocatgoot oggocotcac 41400 tottagooto caactgottg toaggatgot otgtttactg ttagtootot gcagaaccot 41460 cttgcctttc agccaccage cagcctcaca ggtctgcaca cggtaccttc cagagcttcc 41520 cagtgataca aagccatctt cccaggtcat cctggtatat ttgagttatt ggaacaactg 41580 tttgtccaca gaccctatcc atgcccacat accacttagc ggcctctctg tccagtactt 41640 atcaggagac tggcagggca gccataggcc tctctctgta caagcctgac cactgggaag 41700 gaatggagca tetgggtagg gaeteceagg etgeaettae ttttaagtea ttteageeag 41760 tctatgggaa gcctcagtgc caatgccctt tggagccaac tccccttctt tagggcctgg 41820 cctgtgtctg ggctctacac acatggggta atgctagatg actcaagaca ttcaatagga 41880 agagggetee aagacagetg cageateaga aetgageage caegtetggg aetatggeag 41940 gggatcgaag tgtacctttc cctgtgtacc agcctaggcg gggggagcaa gggattctgg 42000 accaagtece atgittaatt aatteateee tetgietaet igatiettet cetetteeti 42060 cccctgagc aagctgatga aatatttccc agcagcccct gacaacttca aaccaacatc 42120 agcacttgcc agcacttttg aaatggcact ttctgtctgt gcttagagct attgccagtt 42180 ctgcagacta actgcagtgt tacctaagag ccactcctga cagagggtga gcacctctag 42240 gcctcccgca aatacagacg ctaccaggtc aaaacaaaga atgattttct tgttccttgt 42300 aaagccccag gtttggagaa agagaagctg aatcaactca gagataggaa gggcttgcag 42360 agctggaggc agcagagcca tagaagtgcc aaaagtgacc tcatgggaac agttggagct 42420 ggagcataca tgtggagtca gccactcaca gtgcaggggt gggcttctgt gaccctcaca 42480 gcaggtgggg tttggtatct ccatgacacc aacactcctg cttccaagac tgagctctga 42540 gatgatgtet ecceaetgte taccaeaag aggggtagee ttggetegte etgtteetgt 42600 tacctagcat gagacaccaa cagcagcaac cagagtatgc tgggtgctaa aatacagtgt 42660 ttgattccac ttggttcccc taacagaagg taagaaacca tacatgttct tacttcacag 42720 aaagaagaac ctgtgatctg agagatgccc ttcccaaggt tgtatttaag aagcagacaa 42780 gettetteca gggtgetget teetetatga ggtgeatage agaettggge ceageetgtg 42840 ggtctacaga gatctgatgc caagttgcct aggaatctgg gacagggaag tcagcaggac 42900 tagggttgct gctgccccat cagggtttat agtaccttta tgtattgtgt gcggcacctt 42960 catagteget gtetatatae atgtaatetg tatgteeaag atatttatta ggggggetaa 43020 ctcagcatca tttctcaatg aagtttctta ccagaggttt cccatactga caagcttgta 43080 cttggctgtt cagacactgt ttcccttctc aggccagaac tgtttaaagc aagcaaacat 43140 gaaagccaga aaaatgagct gattgtgtgc taaccacaga ccctttggta catgcatgta 43200 catgttccag catgcagaat gacacaggca ttatactgtt ttcttctgtg gcgtacacta 43260 gaaaaaaatg tatacagtaa actcactttg taaaacttac tttgaaacca ttatgtgcag 43320 agagaaaagc tacagaccct aagtgtgtat agttcaaggc catggtctcc aagtcattgt 43380 tctattgctg tgcagagaca ccatgactaa ggcaactctt acaaaagagc atgttactgg 43440 ggacttaatt agtttcagag ggctagtcca ttatcatcat gtcagggaac atggcagcat 43500 gcaggcaggc atggcacaga agcagtggct gagagctaca tcttgatcca tgggcagcag 43560 gcagcgagag atgggggagg agagagagag agacagagac agagagacag agaaaaagaa 43620 aaacagagag agagattaat attgattgat tgattgattc tggacctggt gtgggctttt 43680 gagateteaa agtecateet eagagaeatg etgaeetaae teacaaagee acaeeteetg 43740 atcttaccaa acagttcatc agctggggac taaacatgca aacatgttta tgggggccat 43800 tttcagtcaa ccccccaccc acagcagtat tagaaaatga acttagctga gtggatccca 43860 taagcctgta gaatagcact taggaggtag aagcaggagg atcaaaagtt agggtcatcc 43920 ttagctacat attgagtttg agaccagcct agacttcagg agatactctt tcttttttt 43980 tttttttaat ttatttattt attatatgta agtacactgt agctgtcttc agacactcca 44040 gaagagggcg tcagatcttg ttactgatgg ttgtgagcca ccatgtggtt gctgggattt 44100 gaactccgga ccttcggaag agcagtcggg tgctcttacc cactgagcca tctcaccagc 44160 ccgagatact ctttcaaaaa gaaaaaaaga aaaagaaaat gaacccaaac acactcaggt 44220 caggaaatag actattagag ccccctaaac acacacatac tccatccatc ccccattcag 44280 aaccttcttc acatctccaa aaaaatggaa ccattccaca agtcttagtt tttctctgag 44340 tgttacattt gggagaatcc attgttgtat atgattgtgt ccctttgttt tcattgctac 44400 agaattttcc tttgaaaagc tgaagatata ggacagtgat agagcacttg cctggcatgc 44460 acaaggcccc aagttgggtc tctaacagag cgataaaata aaatattttg agaaactaca 44520 ggaaattttt aagaaaatac ttatatcagt tcattgagaa tttcatatac tatattttga 44580 tcatattcac ccccagttcc tctttctaac ttccccacct ccctacttcc cccatcttct 44640 tgtcatcatt gttttctccc ccctccccc ctccccctcc acctcctctt ccccctcctc 44700 ctcattccct tecttectee tectecteet ectetteat aatgtattga etetaatttg 44760 ttetgteeat atacttetgg gtgeaaattg acttaccaag agetacacce etaaatacaa 44820 ctgatttcat ttctatccca gaagctctca actgttcata ggtcctcagc taagggtgaa 44880 ggctcataaa ctctgcccca gtccatgaca gagtactgcc taggcttgat cttgtgcagg 44940 tettatgeag gtgagatgge tgetgtgaga eegtgegtge atgteeetgt catgeecaag 45000 atcctgcttc accccttgaa ttctgggttc cctgacctcc aactctctct aagatagtac 45060 ctgagcttta gaggtgggct tgatatgtat gccccacttg tggctgggca ctccagcgat 45120 caccgtccac tgcacacaag aagtttcccg atgageteta agagetgtac taacttacgg 45180 atacaaaggc acagatttag agggcagtta ggctgtgtcc ttttagcaaa ataataacat 45240

tggccaaatt tacagaacca gatatgtgct gcctccggtg gaatgggctt aagttcagcc 45300 agtaagtgac tggctacctc ataacatttg tggcactact gcaccatggg catagcttac 45360 caccetqqte actactqcaq etcacqqqqe teacaqette etttetetqa tatecacaet 45420 attgaggact attgaatatt attgaagatt ttccccacag cagcctgcag agtatctttg 45480 agtatggtga aggttaaaca gcagggagga agcttcttag taccaacttg atttctccat 45540 gtcctgtgat gggcatgtgt gggtaagcaa tagggtctta tcatcatgtt ctggtaggca 45600 accaagetat gaaaggettt tagagetggg tataatgtag ttecageatt taagaagtgg 45660 atcaagagtt taaggtcacc cttggctaca tcatgaaatt gaagccatct tgagctactc 45720 aaacccttgt ctcaaaagca aaacctgatc atctattctg cattaatcta atcagcgttc 45780 tgattgtttc tgcggtcaag ttattacaga taaatttgtt tatgcttttg tgtgcacatg 45840 catatattct gcttcagtgt agacctagga gtaaaactgt tcatcctaca caattgtatt 45900 tagcaagtag caagagttca ggccttttct aactttctgc ctgattttcc agtttttctc 45960 ctcattgtgt ttttctgcct attcaggata tgaatccttt gttgactgta tatattgcac 46020 atatcagcct agagtcagac agtaatgact agagaacaaa gcaacgccta aggcactgca 46080 gttctttcct ggaggaatag aagttaacag caccactttc tggttcctgg tctctggcca 46140 gccagggaat ccctaaagct ttgattctgt tgattgtcac tttgctctaa gattatgact 46200 aaggaattga gcttctagaa tcagtgacca gagttctcca gatttgggat agccacagat 46260 tttcttttct ttttttttta atcaaaagtg tcttttaggg acctaacttt atggatgact 46380 cttcagccct ttccactcat tccctgtgtg gtgtcatacc tctcagggaa accaatcagg 46440 agagttgaat tctggacccc acttaatcat tacaagagat agtaaggaaa ttcttaatgc 46500 atataccaaa tgaacatgct aaagaaactg gtgattctgc agttatgcat ggattcagaa 46560 atetgtaage ceceagagee cagaacattt aatgttttgg agttetgtga ttgaataetg 46620 aggatgcaac ccccaagatt acaaaggtct ccctagagga gaactgttaa caaaccacac 46680 cagtatgttt gacatttgct cctttctcca gtaggccctt cctccaatgc cctatggtgc 46740 totcatotgo occatatgat atottoottt ototgatato cattgocaaa atgotttgta 46800 gcacatggtg acatgctctc accacgtggg gaaggggtta atggtaatca gcatctttac 46860 tgtctctgaa tctatagtgg tatacacagc tatactgttc tctcaatttc ctggcctgac 46920 caagttgctt cctttgcctt ctctgggtac ctgtgccagg cacacatctc tggcgcctat 46980 acagacacac atotgtaacc cagaggtgot coagaaccaa cototacaag cacatagtoa 47040 tccqqtaqcc ttcaaaccca aggtggcttq ttcctctcta agacttcaag aaatcctaga 47100 gaagetgtga tetttgggee tgtaceceat tgaatgaata ggeeacacat tgetgteeag 47160 tagacagtga gccacagcct ctctctacca gtatgctgga ccagacacta ggcacattca 47220 caaagtgaga gtgtcaagtg tgtctgctct aatcacccac cccaggcatc agaggcttgt 47280 gacactcaca ggttagccct ccaggaagca ggccacagga cttcaggttg agcctggaga 47340 aaggtgccca tggccgtcac ctccagcagc tacttggcag gtaaccagaa catgcttggc 47400 teacteaget ettggetgtg etceceagag ggaagtgttt etaatetgte gteactgetg 47460 ctcccatata ctctgaggca ttgtggcttt ttcttggtgg ttgggcagga agcctccaga 47520 gcctaaagga attgccatgc ttgatgacag acaaaggcta ttgatggcta taaatcactt 47580 agctgctgcc tggcttattt aagaggaaga ggacatgtta actattctga ggataggcct 47640 tcctgtggtg ggtacccaac tgaaaaggga tctcacagat tgactccagc tgtgcccgct 47700 gagttaagtg gaaggaaatg ccccacttag acatgacttt gcaaagccaa ccagcaaatc 47760 atcccattga cttgtagctc cacctcactg ggcatcctca agtgacccac cttaagcagt 47820 gttgggccag gatccaaggt gaggaagcca gaggctgact agctgggacg gcaccacatt 47880 gagtgggggc tgttctcaag gaggcagatc tggcttagcc ctgaatgtgg agactgtgct 47940 atcaccatca tgtccctgaa ggctgtctag agctctctga ttctgtagtc atgcctccct 48000 tgggggaagt gctccactca ccgaccgggg cttttgtctc caaagctgag acatctccat 48060 ctatgtcctt cttgttcctt atttcttcac ataagacact gtgaccacct tctcctgggt 48120 gtgtgaccta gcttcgttag agctgtttag aattcgagaa atacaattgt cttgtagttt 48180 tcactgggag aggtcataac ctttgcccgt taatgtatat atcctcttaa tgacatcagc 48240 tagacaaaac taaggtttta ataactgagg attgttcaaa atatttatgt tatgtaaaaa 48300 gtgtgtgggt gtttttacag tatggagatt gaacctaaaa gttcatacat agcaggcaag 48360 tgctccacga gctgtatcct tagctatttt taattcctta ttttgagaca aagcttttct 48420 aaatttccca agetggccta gttateettg acettgggat eeteetgtet tagtetecaa 48480 gtaagattac atgactgctg tgccatgccc agctgaaaat gttttctact gagtctccta 48540 cactctacac agccattttc cctacagtga gtgaccgcag agtcacaggg ttttcccttg 48600 actttactga agecttgece tgtgtgtett tgtetetgee etgatgaeta teagageagt 48660 tgtcacctca ccaccttcta tgtggtaact gtgaacacta ggccttgtgg ggacatagaa 48720 ccatagggag agaggcaaat gttagaattc tcatcccagg tgagagaagg ttatagttct 48780 gtttcccaca gctgcctttg aggacacctc ctagttctgc accatcttcc cctctctgag 48900 attotgtatg titgtgttot acatotgcoa actaagotaa actgaotoaa otattagatg 48960 cattttccta ccccatccca tcctatacca cccaactgca cctcatttcc cccatcccac 49020

```
cccatcccat cccactcctc ctccctcccg ccaaatccca tcatgaagtg cctccttccc 49080
tggagcctag caggttgccc accactttat gctaaatatg tgtcctctat cctttagtat 49140
aaccagacta gtcaggtggt caccatgttt tgtgtaagga atgccattca tcactgttct 49200
gctcatgaaa cagaatgccc ttttcactcc ctctgacttt ctcagtgaat tttccagtgc 49260
tgatgtcatc aaacttgact cccaattttt aacaaccctc agtctcagaa ctaccagtcc 49320
cctgctgagt acttcaagag gcgggtcttg cctctgcctg tgcaactcag tggaatgtga 49380
atgettttga etgtgaggta gagagtgeat attaagagge tttgeagatt ttetgtagat 49440
tetggtteee agtaettaga geagaeetgg gaeeeageea ggggetgetg aggagtttgt 49500
agcactgatg aagttetgaa cagteeetee ageagageta geacaetgeg gatgeteage 49560
agacaccggg tgcacgcctc tcctcgcaag catggattgc ttcccctgca tccttaatct 49620
tagcatgatg ceteegttte ttetaaagea eeaggegeee gteteettea ettaetetag 49680
atggttctca tggtggaggt taagaattcc ccatctgaac tctaaaccaa ataccttatg 49740
aacttccaag ttttagattt tagagcattt gagattttat gtttgtattc cagagcctat 49800
gcaaatattc acaaatctga aaatgaaatc tgaagcactt ttggtctcag catttcagat 49860
aagaggttaa cagcctgtat gctaatcata tttatggaat acttagcagt gtgttggccc 49920
ctaagataag aactgatgaa acatctacac cttcctggaa taacctgaga ttccacagac 49980
cctgtggtgt ttggagccc
```

<210> 6 <211> 36901 <212> DNA <213> Mus musculus

<400> 6

catteetgtg eccattgagt taccaagace agaaaaceae tattgeeatt gggetettgg 60 gaaataaagg ttccattcac ataaggatgc ccactccaca cctaccacca tcatttttgc 120 agtecettee tgtteaggea ageteaceat gggageeaag ceagtgetgt teagateeea 180 gtagcaatat ccacagccag agagatgcag aagtcatata ggcaagagcc tatatgcgga 240 ctgttacata ccagacagtt gtgtccccac tgctaaacct agagaaatgt tccacaaatg 300 gcccagattg caagaagaac cctgggaaat tctaccatgc atctcacaaa ttagaagacc 360 agtcattqtq tqtattqtaa gatcaatqta aacctcatqc ctttqcttqt ctaqctaqaq 420 ccaaqcactq tqcaqtqcat gqaaacaata aaggtccaga gaacccactg agggagacag 480 gcatggaaag caatatttat aacaaatact tagggtgggg catgatggga gaaatgtcct 540 tgggctcaat cagctcatga tcagatgagc ggtgtggtgg aaacacgagg tgggagcagc 600 acaggtcacc cagctgtggc cagaaagcag caaatggcaa gaggaagggg ccaggaacaa 660 ggtatagacc ccaagaattc ccagaactca ggccctgaag tgccccttcc tcctaaatac 720 tctgccatcc tccaaaacag tgtcatcagc aagggaccag gcctttaact catgaacctc 780 gggggggtgg ggggggggc atttcatgtt cacaccatag gggtgacaaa ggagttagga 840 gccaggctcc caggatgccc agcctgggaa ggaaagtaca tgcactgctt ctctcagctg 900 gggcctcatt ggacaggcaa gtgccctgtg agcaggtgtc aggtaggagc ctgtattttg 960 acatggagag gacaaggcag gtgcctgggt gctgccaggt ggaaagggca aacggcctgt 1020 gtgtgtgtct ggtgcagtcc aggcacgtgc aggggaagcc cagaactcgc tggatgggaa 1080 cacacccatc taaagcactc tgaacccagt tcataaaacc atgggtcaat attttcaaag 1140 tcacagaact aatgagetet gecagaetea acagaeegea teecagtggg tgataagaea 1200 agtgttagca cagaggaaac ggcccaggcg ggaagaggct tttcttaatc tgttgggttt 1260 cgtgtttata gtaaagcagc tgcccttgga caagagtatt catttatcag gtcacccaca 1320 aaggaggett agttactatg etcaecetgt ttgggtttaa gtaataaetg tetacagaca 1380 agtaaaaatt ggatcagggc aagttcagta ggtcccatca ggcctgcaga agctgtctca 1440 ggctctgact gccaagttcg tgtgcctgtt gtccagcagg aataggcaga gagaaagctg 1500 tggaaaccct agcctagccc cgaagagctc tattttcacc ctttaaaaat gtgtgttgtc 1560 ttccactcag tatttctgtg aaacagcagc aaagaatgat tctagtgtgc tcatttagtc 1620 cctgaacagt tcatcagcat cccacttgtc tctgggattc ccaagaccat tcaggcctag 1680 atteccecca cacetteett eccaeggett ggggtetgea gaggaaagtg ggeagaggaa 1740 ggggaagagc cagctcacat tggtaaggcc ttaccaacca ggaaaaataa ggatggcagt 1800 gacccagcta agcatcctga gtactacaga ggaggctttg tgagggaggc ctcacttcca 1860 acagagattc tgtcacctcc tgagtcctgg actaaggtac ccagagtcac cttctcactc 1920 ccgctagctt ctgtgggttc agtgacacag atcaggaccc aggctgtacc tggaagcgtc 1980 agteteaega gaggtettat ettaeteatt etetgttgte ttgaggtaaa aacageatgt 2040 gcagaactgt aaggtgctgc tggtctttgt aaataaagaa ataatctctg atgaaaagta 2100 tttaaagcat ggaagtgcac acctataata cccacactcg ggaggcaaaa acagaaacat 2160 tgccataggc ttgaagctca cctgagctat gtagtgtagc aagttccaga agatctggac 2220 tgtatggtta agactgtcac caccatcatc atcataatga attgtatatt attataataa 2280

tattaaaaag tatttagtgg ctgcttccta tgtcctagtc actgttcaag ggactgggag 2340 gtaagctgtc tgagctcccc aggttagtga cattgagcag ctgtgactgg cccaaaagaa 2400 tgcagggaca ggaagaacag gaaaaaaatc acaagtagtc aggtagagcc ccaagctagg 2460 actgcagtag gcagagcagg agtgagcaag ctcacacggg caccactaag agctgatcca 2520 accatggttt gtccgtgact gatggctttg gagcaaagca aggatacaag tagaagccac 2580 acteceaect aagagtgtet ggeteeagga tgeeettete etgaaecttg gaettetggt 2640 gaaaacttat ggatggtgga tccctaatgg tttcccaagt gcttgtcttt ctaggaagct 2700 tattttaaac tccacccca tgcaaggtca ggctatggct tactcagata caatcgtaaa 2760 tgtcagcaaa gccatggaga agatgaagaa gtaagaagga tcatctccct tttaccctcc 2820 aaagactgaa gcctgtggac agggccctgg gcagttcacc caggggcttg acaacttaca 2880 cagetetgae taegtteeta tgecagatge agtetgtetg etecteecat etgttetggt 2940 cttccccaga gcctcagacc agcagacaga aatcaagcca tgcttggttc tagatctgtt 3000 gcaggtgcag tgtgcatggt gggaagggga atgaggcaga gcaagcagct tgagtcactc 3060 atgccagggc tecetecact aatatecete ectagagatg gactcaggtt cettecacag 3120 cctctgcagg cctggtcttg tattgcccag acagagatca cctacttcag aaggggcact 3180 cagtacttgc agtgtcctct tgattggatg gaaccaaaca atgctgggac acaggccatc 3240 ccccagaccc acaggagcag ctccaccatg caaatctacc tccagcttga ggtgggctgc 3300 ataggtaagc tgatacacaa ccctgcttgg taaaggagaa gacaaagtaa cattcaatac 3360 aaaaaaaaa aaaaaaaaa aaaaaaagag tttgagggtc tagaccaact aaggcttgga 3420 gttctttagg gagcagcatt tggatttcat gtaccatccc agagcagggt tctccaaaga 3480 gaatagetta taceteette ceaettaaca cagecaceca aggecagaaa acetagagaa 3540° gccaaagctg caggacttgg tggtgcccca cccagatctg ggccctgcca cattctggct 3600 ctagtcgtct tctatagcct ctgagactca gtttcccact gtgcacatta agacctacag 3660 tttttttcct gggaaaggac tcattgggct aaatgacaaa gcacacagag agcttggctg 3720 cactetettt tetteccace attagtggce teaccactee agggtggcet tggaaaatgg 3780 ggcccaccc gccccccag cagcccaagc aaagcacact ttgaataaag cagagcagcc 3840 tgageteceg ggtgaeetgg etectectet cetetetect etagagetat etettgeagt 3900 tgtatgtgta tgagaggatc cgtgtgttta aaacaccctt ctccctagaa catcttcata 3960 cccaaattct agctttcaaa ctaaagttga tccctcccaa agtgagaggt gactttggct 4020 tccctgagtt tatccaagct ctgttcttgg tataggtctt cagggtcagc ctcctctact 4080 tgggtgtaag agggagccct ggccttggct aggatctgag cagggccaga aagctgttgc 4140 aggcaggcag cagctcccag agggaatgtg cttctgtgtg ccttggccac acctcctcta 4200 accapteget ccaptitical togaactaga qaaaqqctct catqtqtqtg tqtgtgtgtg 4260 tgtgtacaca tcataaaaga gccagcaagg cccaattacc cttcactgca atgctacaca 4320 gcacaatgcc tggttctgct taggggccag agctgttgcc cacgtgcagg cctgccccgt 4380 gcctctgtgt gcagagctaa gccttgggaa gagcaaggct tcgtggctag ctttatgctg 4440 acaaagggct ttcagtgctg tcaaatgact gcaagcagtc ccttccccct ccctaccaca 4500 gccactgggc ctccctttgg cagggccaga gggctgcact tgaacgccta gcctctggag 4560 acttcctttt gaactagaaa aacatggctc aaacatgctt cactgcagca gggctctgcc 4620 tgctgaacct atagaaaggc ctggagtaga ttcagtccca cagactagaa aacctggctc 4680 tggcctcacc cacaaggcct gttatgtctg gctccagagg cctgctcctc tggggttttc 4740 catgcctgtg aactaggccc cattcatttc cctgcggttt catgggaacg tccaaaatat 4800 tgagcaggtt gcagggagcc caggaggaaa ggggtcagtg aaaggcccta gctgtgacgt 4860 ggggtggccc tgtggtcaag ccctggtggg cgccttgtca gtctgctgct gcctctcctc 4920 ccaggcaccc cttccactcc cctgaagctt ggcctgcagc agcactcccc ttccccaccc 4980 aactgcaaca agatctctac agttccccac ccccagcatc cctcaattta gtactgatca 5100 gaccactgac ttcccatcac gccccattcc cttgcagttt tccaccacac tacactcaat 5160 ttggggctgc tgagagagca gcaggtctcc tgtgagggtg gctgctgtct tcccaccttg 5220 ggctgcccag ctatagagga gagtcatgct ctagcacaca actcctgtga gagcccagca 5280 gctgccttca cagctactgg ggagcccaag ggctccttaa gccaacagtg aggatgtacc 5340 catgtggggg aaatttggtt tgccgaagaa atgaatttga aactagctgg gagcaattct 5400 tatcaaattt ccatgttagc agttttcacc aagaactaat tgaacaatct ctgtgagtgg 5460 cctaattcca ttagcatgag attcccacaa agttaacaag tgccctagtg gccaagggca 5520 gagaggetet tetgteteae aettggtttt ggtetttgaa gatggatgga gttteaggtt 5580 tragcaarag craggragat grtracetet ggrccagtag gettraatet ragragetra 5640 gctccagatc aacttcagaa gccactttgc aagtattcag ggtatgaaag ggctgatcag 5700 accactgact teceateeca agatgaattt etettetggg ttageaggta aaatggatet 5760 gagggtagaa catcctacag acctcacctc ccttgccagg cagtattgag agaccaggta 5820 cagaggagta gaaaatatga aggcaaagtc tgaggagcat gagtctggac agggcctgcc 5880 ctcagcacca cctccccacc tgaggcaaga cccaaagtta gtgccagcat ctcactgttg 5940 tecagaaact gagttetagg ggeagaaaca geageeacet gggaeetgtt cetgteettg 6000

gtgggcttga cagttccagg gacggtgctc tggggttacc catcagccct gtggcatcat 6120 gctagatgag gagcccagag aatgaagcat ctagcttctt tgtccctgac tagctataga 6180 ctgagcaagg gtcctctctt cttgacagct gcagcatggt gtcagcattg actgctatga 6240 accageette etataggtag catggteagg acagaggttg cagacetace tacaaggeee 6300 gcctgctgga tggcttcctg cgggctctct cagggcatga gcccttgcct cctagaatac 6420 cttcgacttg tctaaaacta gtcataaggc cctggctcct tccttctgtc actgactcac 6480 caaaactcaa tggagcattg cctgcacttg acctatcacc ccttccctgt ttttctaaac 6540 cagattcccc agccctacca ccctggtggt ttgcctcaac ttgccagcct caggggcctt 6600 ttettaceet tteetetgee tetgeageae tteteacagg geageetget acageteete 6660 catgtccctc tgccttattc taccacctct accttctctg ttctggcctc ctgggggcca 6720 gtgcacacgc cttcgtcacc tggctcgctc aagccctccc ttaattgtct catccctcat 6780 ccggtcctac tctgtccccc agccccaact attcccacat acttatttga aacatctttc 6840 ttgeteagta geetteeage teetgagtgg ggteeaagee tgtaceetea atteettgee 6900 tttccacctc gagctttgtg tttcatttct ggttccttga catcccttga aatgaatcct 6960 gcttgtgagt gtacctccct gtggatggat atacctgtgg gcgtcttagg aagtatttag 7020 gcattctgat tgcctctgag gccactggcc ccaagagcac agactgatgc gtagggatat 7080 aggacttgga gcagatcact tccctatttg cacattaagc tcctgccacc cagaaagata 7140 agaacattgt agggccatag gagaagtgat acccagggtg gagtgaggcc acagctagaa 7200 aagatgagta agaaatccaa caaagggatt caaagctagc tetgaaagct gaggcctacc 7260 agccattgct agtgtaaata actctgctgc tgtgtatgaa ggaagtagta ctcagtagat 7320 aaggaagtag tactcaggag ataaggaagt agtactcagt agattggtta gggcctgtag 7380 agaaaagatc aggagacttg gtgaccccaa attatcagca tgcctggcag tgagtattag 7440 gaagttagaa acacctgaga actaaacaga aaggacaata gtgatagagg gacccaacag 7500 tectacetee tgaactggag cetgatgeea ttgeteecag gagteettea etetgtgeag 7560 gttgttgaac atccactctg ggactagcac atataccact agggatggag acgagataca 7620 acctaggacc gagagaggcc atcacagtca tgaaggccag atgctatgat ggggaccaag 7680 aggatgetaa gagagagtte etcatgetat ettecaaact gagtgatage caaagaaagg 7740 acatgagega ggageageee tagtactetg ggetgtgaga acagtatatg aaaggacaga 7800 agccaaaagg gcctcaggac ttcagtagag ccaaagtagg atggagcagg gaagaagagt 7860 gatgcaqtcc aaacatacat aaaacatacc atattgttta gccaggtaga ggaactgcta 7920 gtottaaaca gtggttootg otggaaggga catgacootg ttttgtgtga aggcaacaca 7980 gtagcaggag atgacgacct ggacaacagt gatgacagga aggaaagcaa gagatgcttc 8040 tggaaatcta ctccagatcc tagaactgga ccatttgagc aactcttgca taccctgttg 8100 ctctttaaaa agaggaagaa agaaaagaaa aaaggaaagg aaaggaaagg 8160 aaaggaaagg aaaggaaagg aaaggaaagg aaaggaaagg aaaggaaagg 8220 aagaaaggaa gaaaggaaga aaggaagaaa tggaaaggga aggaggggag gggaagggag 8280 cagacaagag gaggtctagc taggctaggg tagacacact gtagtctgag tggtacttat 8460 ttatggccag gaacttggtc gctgattttc acttggttgg catgcctgcc ttcctcagag 8520 getteteace taaccactgt etgacetgte aggatgetga ggttatgtag aetgaaagae 8580 cctacataga gaaagacaca atctcaaaaa attaggtaaa tagcaaataa taaccacatt 8640 tggacacaag taaataaaca tggcccagtc tgggtcctcg gatggtaggt gcagtgtcca 8700 gcagcataag ttgtgttgag catactcact tcctaaggta aagaatgcct ataatagtaa 8760 taaattgaca gcagtgtaaa tttgtatctg aacctttccc tttaagtggt atcagtaccg 8820 ttctgggcgg aagcttcctt tcttatgaca tggaatgtgc atctctggtg tgcacttata 8880 tataggttga ttatggcttg ccaggacatg aaaccetgge tcagetggte cetgggatga 8940 gaaacagcaa accttccccc tctttcccca ggccttgcag gcccagacag caggtaggga 9000 ctgcttgaga gagggctgca gagctttcac cgtgatgtcc tggctgacag cctcctgtca 9060 cagaagagtc ctacccaaga cctccagagt tgtggggccc cagtggctca ggcctccaga 9120 tgctcagcag atgccagacc tgggactgag gccccatctc tgagggcttg gcttgctgtt 9180 ctggaaggtg atcctggctg tcagccattc ttgagcccct atttagagca gttgtcaggc 9240 agttgctggg attcagctag ctccccatcc ccagcagggc tgagtgatct catgcctatg 9300 cgatgctgtc gcctggggag gaggtgccct aagactgaag gcaggtgccc agaccagaag 9360 gagagtctag gccatggcaa cccagacaac cctcagccac tttcccagtt ccatacccta 9420 atgtgctcca gcctggttca tttgccctgg gatagcacaa ggcatcattt gagtttggct 9480 gcaaacttta tgtgaagttt gcccctttcc ccacaagaga ggaaagctca gattgataag 9540 ctcgcttgcc agagacccca cagccaaccg gtttgcacag aaccctcagc ccaaaaggca 9600 gctttagcta acgaaacagc aactggcact ccagggaccc ctggactttg ggccacaatt 9660 tgtaaactet egagetatte tteecagaaa gttettgggt tetaagtgge ttttgeeacg 9720 teccaggaet ggaacagaag agtetggtgg eeceetgetg ateaetgtga gaactgeaca 9780 agggtagaca ggtgccagca agaggggcct tggctagccc caggtgagag gagagatctg 9840

tgcacccctc catgggtgat tggccccaca gggaatctta agttcagtgg agctctggct 9900 getgetggtt tggecatgte teageetgte agttetagat ettetagate etgggeetee 9960 tgggagtetg ggageteetg ggeeagagta tegetgggte etttgtgatg tgeacatget 10020 tgctccttcc ccttccactt gcaggatgag aggattttaa gatcatttcc tcaaaccacc 10080 ctaggacact aacgagcctt atccgcaccc agaagtggga actttgttcc gtgcatcctc 10140 ttggttggtg acaggattta agttaatgct ttgctcttga cagactgttg tgaagaattc 10200 ctaggctgat gtcttaactc agagggagag aggaagcgaa gggcagatgg acagggggtg 10260 cagaatggac agatggacaa gggctactaa tggaaatagg aatcacaggc accaaggtgc 10320 ctgaacaagg ccagcctatg caaccagagt catgccagat tgtgatcaga gttagacatg 10380 ctcttctttt ctcaaggtct tgggcagctt acagggctgt gcagatgtcc atggaggata 10440 aattgtcagg tcatggtcac tggagaagct gcttgcctgg agtcttctca tgcctgtttc 10500 ccatagtggc ccctccttca ccccatctct cttctcccac catgaactca tgtggaacaa 10560 agcagaagag ttcctgtgga ccaggactct ggatcatccc atcaaagtct ctgacttata 10620 gettggagea tggagaaggg teeetgteet gageeattag eecaceetge teetgeetge 10680 ctaacageet tateeteaca gteetgetgt ggggeeetae tgeeacetge eggetteatt 10740 tacaaactgc agtcctagtt cagccttggg attacaagag actgtgtact ctggtcaaca 10800 ggattctgag actgcacaaa gagaacaggt ctggaaacag tcctgacttc ccatagcagt 10860 gtcagagcat ttatttaaca gtctgagcag ggacagacag catcccagca ctgtggaggt 10920 tgtgacaagg tgaaggatta tcagatgtgt tagtcatttg tgtggtgtat gtgaagaaag 10980 gaaagcacca ctgtgtcttg gacagttgat attcctgctt ggtatctggc ccagaacaca 11040 tgttccctct gcctttgcac cagccctgtg atcagacatt agcattgtct tactttggga 11100 aggaagaaca ggagattcac caggggttcc acaacaagag tgtggtagaa ccagcattca 11160 aactgtctca gaggcttggt ggtcagtgat ggtgattgtc agtactgata agcacaagaa 11220 gggattgggg actgagataa gggtgtcagc ctaaaaagct ctgcctacaa actagtgggt 11280 aacacaaagg cttttcttct tgagctgagt ctagtgagtc catgacagaa gccaagtgtg 11340 cagaggeece catgaetgga getaggettg eccaggeece aatgaeagga tegggtgtge 11400 acaggtcccc atgacaggag ccaggtgtgt ccagacccca cctagtgggc ttcatgagcc 11460 ccttgtagag aaagctctgc aaataggcac ctagacagag cagaggcaag cgtcttcaca 11520 qcagqtccag tctggagaag gaacattctc ctatatgtct gattttcctt ctaagaactt 11580 qtctaqatqa caqatctgac caagcaacac tactcagcct ccagtagagg gatttatccc 11640 aggtttcctc agacactggc agactctcag agctgcctca gtgggagaag aagactaagg 11700 ctcaacatgc agcttggggt gtctcctcga agctgaacaa ggtctctaat ggcttttgcc 11760 ttcccaggga gcaagctttt tccacacagg acatgctgac tatagtagta tcaggatgta 11820 cacacctgaa agacttcatg ttcaatccac ttattcacca agggagcccc aagggtcagg 11880 ggagaacctg cctgcccagg attgaaatac aggtaactaa cttcagggct ggttgactct 11940 gtctcctgct gtgcctggct tcctaccctt gacacacttc ctccatcttc catcagtccc 12000 cacctcttct cactagggcc ttgacatatt ttcatcttcc tatttagagc tttatcccca 12060 tgtacttagt tacttatagt aattctaatt acactgaagt gaaggaaaat agaatgatag 12120 ctcttcttac aagtgagccc cagaggaagc ccagcaggtc ttcttaccag agatcattac 12180 tgtgtatcat ctctggacca ggcatgacct gagagcatcc ccatttagtg agaaatgaga 12240 caggagacca catacacatt cagaccaaaa gagaaagtca ttattgacag gttgactcta 12300 ggaaatctga gcatggagat gaaagagaaa gagcagaaga actagtttga tcaggtcaca 12360 gaaaggttct tacactgaga actaaggtat tagagaatca gctgagccaa ggccttggga 12420 caggggcagt agcacctgtc tccaggatcc ctctagttac tgtctatcct ccacaggctt 12480 gtagaggagt teatgeteet ggeeaacatg geggtggeee acaagatett eegeacette 12540 cctgagcagg ccctgctgcg ccggcatccc ccaccacaga cgaagatgct cagtgacctg 12600 gtggagttct gtgaccagat ggggctgccc atggatgtca gctctgcagg ggccctaaat 12660 gtgagtgcta gtgggcaggt aatgggaaga cctgcttgga gaaaagagat taaagcctag 12720 aagttgggct ggtggtgact tgtctgcctc catgtagcca ctccctatgt agccaggtca 12780 gtctcccctg cggtggagaa gatggcatcc actaggggta ggctctatta tcaggtctgt 12840 tccttgctga gccagggtaa caggaagcaa ggaatctttc ttagagggaa gcacttcaca 12960 tgttcccttc tcagaggtaa gctttatgag gctgcagaac cagtgtcctt gctcatccca 13020 ccaaaaggag atctcccacc catgttccaa gatggaggtg ggtgtgaagt aggcaaagga 13080 ttcctctaat aaagagagct ggcctattgt aagcatggaa gatcttaggc ccattgtatg 13140 acacagacta tggatcacag ctcttacacc ctgcaggtag tcaacatggc ccatagcctg 13200 ggaacccctc tctaccttcc ccaaaatggg atcaagcctg tttccaaggc caaccatatc 13260 tcatacaggt ttctggggtt tacttctaga aaagcctgac taagacattt ggagatgaca 13320 agtactetet ggeeeggaag gaggtgetea ceaacatgta eteceggeee atgeaggtaa 13380 ggaggggcca caccagcccc tgatcccagt agtacccata gctctggctg gcaagcacca 13440 cgtgtacata gcccactact gtcttgctct gctctgggat ctactggata gagaggcgct 13500 gaggaacact atctggcaag aaaagctgca gtcacacctg ggacaggcgc actgagctcc 13560 agaagaaatc tatcetetgt getgaaaage aggeteeate eeteaggage tgtatggeet 13620 gtggctgcta gagaccccag gcaagagaaa aggtctccat ctctactgta gctgcagtct 13680 gcaggagaat cagtctgctt cgagcttggg cccatgttcc caagcaagtg acagctagga 13740 gatagatggg ctggctccta gcaggctgtc acagccctcc agcctacact gcagtctctg 13800 cagggcctaa gcatccttgg gatgggagcc atctcagtag attggcaggt caattggagc 13860 tacaggtact aatggggtca gctgtgggcc ccagcacttg ccagggcagt ggcaggccat 13920 ttttcaaggg tcactctcaa cagattcaat ctgttcatga gagtcaggta gcctcagcca 13980 gccacagctg atttatttcc tgataactcc tggctctact aggaatggag ccatcagggc 14040 cgttcgggga cttggctgcc tgttccccac cctaccacct accctagaca gtgcacacaa 14100 gaccetagge tgtgccetgt ggagtgetge teceaecagg attetgatgg caaggactaa 14160 gtggcaagtg acagggacag gtcagggcac agcaacagca gcacaacagt ggggagtgag 14220 gcctggttcc caagagagct gctgaaacag gacacaagct gtcccagtgg tctctggcca 14280 ctacagagaa gccatgattg ttgccctgcc cagagatagc tacactgacc aaggaggagc 14340 cttgacctct tttcctcctc acgctgcctt tctgaggaac tgagccacca ctgaaaacaa 14400 agataaacat gacttactat gaagactatg ccctctgtcc ccagcaactt gccccagatg 14460 tageteaaga teeageaggg ggetgtgete tgagttetag ggetatgtae atggagtaac 14520 cagaaaagga tgtcatttgg ccagggattc tggagctttc aaagaagtga acatccttct 14580 aggcaacagc tgctgattcc aaggctgtga tggctgaagc cagacctcat ctaggttgtt 14640 cctaggttgc ageggetcag tggttccttt ggctcaggtc tcttagacct gtggatcacc 14700 gtggacagtt gttcaggagc aaactgatgc aggctggcaa gctaacaaac taccctcttg 14760 actggcatat gctagagtat tgtactgtac ttgtacttgt ggctagtgtg accatcaact 14820 gggaagagat cagagccaga ggaaatatgg ttggctcagc cagaagctga ggaaccttac 14880 gggctgctct cccttggagg ttggcatctt gggctggcca gggacatgcg gcatcctcag 14940 tttctgcttg tgtctccaga agacaattca cagccctggg ccaacatggc catatgtttt 15000 cctatctgca atcatcttga cccagggtga ctgctcggat cctaaggaaa attattccac 15060 agcaactcct ctgcatcatt cctggtaggg actcagcaac cataggcctt aaggaggaag 15120 agccettgea cagetgeet ggtggetagt cecacagtge tagaggeeac ecageateet 15180 gagggettee agecteecat geecaacaga ggeatagett cetgagetgt tgegageatt 15240 gccctcatga atggagcccg gcagccctag gcatgactag catgcatcct gagcagggaa 15300 gggctctggt cattacatgc tgtccatggc agctgctgag aaccccttaa gtaggatgac 15360 cctggcccca agaatctggg gctttgatca gctgcctgaa gctgataggg gaggtgtgta 15420 tcaaccttgc catgggccag gcttgggtct cagcacctag ccgacccagc caggcttagt 15480 cccactctcc ctccagatgg cactgtactt ctgctctggg atgctgcagg accaggagca 15540 qttccgqcat tatgctctca acgttcccct ctacacacac ttcacctctc ccatccgccg 15600 ctttqctqac qtcataqtqc accqcctcct qqctqctqct ctqqqtaaqq qacatqactc 15660 tggcctggga agacctttgc tggtcgagag ttacccactc tcagagtaag tgaccacatt 15720 actgttatca tggacatgcc gagggacaga gaagcctaag tctgaacact gtcgatccac 15780 acccagatga tggaagcttt agtgagactt attgcaagcg cgggaccata tatggtccca 15840 gageettgee teageacaea accetectta tecceataet ageaaceetg gtegeeetet 15900 cctccaggct acagtgaaca gccagatgtg gagcctgata ccctacagaa gcaagctgac 15960 cactgcaatg accgtcgcat ggcttccaaa cgtgtgcagg agctcagcat cggcctcttc 16020 ttcgcagttc tagtaaaggt gagtgtccag cctggcccct tcttcttccc ctttccctgt 16080 cctccgatga atggagcacc agtgcaggtc ctccctggga ggatgccacg atgcattgtt 16140 cctacaggag agtggccccc tggagtccga agccatggtg atgggtgtcc tgaaccaagc 16200 tttcgacgtg ctggtgctgc gctttggggt gcagaagcgc atctactgca atgtgagtat 16260 ccctggtatg aatgggaggc ctgcacctac aggcaaaacc aaacccattt tcccgcctgt 16320 gtctagttcc ttgttgggga aatattcccc tggtccagaa tatcccatga tagtttcaca 16380 ggtgtaaatg gtgggattca actgagctcc cttctgtccc tggccattag ctatgcaggg 16440 cccacagact gcatcctata gcagtgagtt tcactggcat gtggcaagaa agggtccaga 16500 cccctgaacc caagtaggcc tgcccaggac agggcctcag gccaagggtc aagtctgaac 16560 tcttccttaa aagcccaggc actcagaaca taaccaggat ggcagggtgt gggacctgtg 16620 atgttcttat agaaacatgc agaaggggag gccagagggt agccagcact gctctggaca 16680 ctgtgtcccc aaacagaaac aagaggccca tcctgccttg gcttcttccc tggatgacag 16740 tttattcaaa gtcctcttgg tgccttctgt aatgtcactt gggggggcttt gctttagctg 16800 ctctgtggtc accaagtcac cacctggctc ctacccctgg ctttgaactt cttacataca 16860 cttggggaag tgtggaaccc tgcactggaa gagacacagg attcatgaaa gaggcagaac 16920 aggaaagggc caagtgcagc tggaactacc agacacctgt agttacctgg ctctcagcct 16980 ggtggtcagg tctatcacca acagcctagg cagatctctt ctctttgcta cagtcaccac 17040 cctcccacat tgtcccttgg aattgggtca ccttcaggtt ctactttgac caaaggtgac 17100 ttagcagaac ctcctaaatc tggctgaggt ggaccaagga tagggggctg ggggatgtct 17160 ctgtccaagc aggcagctac agtaaggcag ccggtacaaa gctccctcca gccagtcaga 17220 aataggcagg cagggcagaa gaggtgtctg aagcccatag cctgaggctc cggtgtgtcc 17280 ccctgccccc aggcactggc cctgcgatcc tacagcttcc agaaggtggg gaagaagcca 17340 gageteacte ttgtttggga geetgatgae ettgaagagg ageeaacaea geaggteagt 17400

cccctgctgt gtccctaagc ctacctctgt ctcaaacgtg tgcccctagg tcctcatctg 17460 ccctcatttc tccccagcac cataggttcc cctgtgggat tccaccaagc cctggcttag 17520 actgccaggt tctatatggg aacacccact atggcagtgg ttctcaacct tcctgatgca 17580 gcgaccctta acacagttcc tcatgctgtg gtgacaccct tcccccagcc attaaattat 17640 tttcgttgct acttcataac tataagtttg ctgctgttat aaatcaaatg taaatatttt 17700 tggagataga ggcaaagggt ctcgaacgac aggttgggga ctgctgctct ataggtagat 17760 aggtgctatt cctctcccct gaacagaact tttcagaaat tttgagaagc tgataaaagc 17820 tttcttgctc ctcgtgaatg gtcactgaat aacaaatgtc tacatagtgc catttagcct 17940 actggttttc cccagaccca atgaatccca tttacagata ggcgatagag gctcgggaag 18000 ttaagtgage etcagtggte agttggettt gattgeagge eetcacetge eetgteetet 18060 cctgttcctg gctctgctac aggtcatcac catcttcagc ctggtggatg tggtcctgca 18120 ggcagaggcc acagccctca agtacagtgc tatcctgaag cgaccaggcc tggagaaggc 18180 gtctgatgag gagcctgagg actgaatgct agcccaagcc aggcctgtgc ctgccctacc 18240 ctgctggctt ttaggaatag gaccttttga caccaaaggg gatttttaat ttggttttta 18300 acaactcagg ggtttgtttt tatttttatt tttcctttta ttttactttt gcagctcagt 18360 ttttaaatga actggaaggt taggggtcag ggcaggggat gctgaggcct ggcctgtgct 18420 tecetgagea gagaggatee cagteeteet gggeaggeag cecegettet accaggegae 18480 ccactgccct tccctgccca ggaaatgggg ggtttcagca aatcagtgtc atggaataaa 18540 atcaagtgtg aattgctgtc tgtgtagatg ccatgggcaa gcatggcagc tgggtggcct 18600 gtcaccgagg gcaaggggct ccctagaatc cacctcacag ctgagctggg gtcatcagct 18660 caggacette etgecagete cagggtgatt cacgageeat gtgtggcaga ttgatgetge 18720 agcctccttc tagctgatta aaaatgtaat tagtatgcac agtagggagc tgccagtcac 18780 cetgtgcatg tggctgtggc cetecetece egecetteet etetgttgcc ageceatggg 18840 atgtggggag gtgggactac cacctctctt cttatatatc ataggccaaa gctcccagga 18900 gccctgttca cagctatgct atgagtaggt acctcaatac ctgcagtttc aaacatgtac 18960 cctaaaaggt aaaggcagac cttccagagg gcaggaggac ttcaaaacag atcctacctg 19020 acccagccac ctgcttagca tcccaagtac tagcaattcc tacccttctg agcactgggc 19080 agcctcttcc ctagggaact gggcacagtg tatcctcctt tcaccagact ggaatagtat 19140 gaattggctt caaaagcaac tagaatctag gatgaaaacc aaagcaacca aggccctgtt 19200 ccccagtgct gttccctgtg gcatcaggat taacagaccc atctgatatg gttatggtga 19260 ttttcttcaa aaaagattct gtggagtccc ctggcaggtt ccttgcagtg agtgactggc 19320 acagctgcaa ggatatcaca gccctaggat gggctgttgt ctgaggagag ccacagacac 19380 gccccacctg ccctgggctc cttgtcagcc tcacacagcc ttcagctgcc tgtcctccca 19440 ccccttaggt ctcccttctg ctcccattcc cagaccagca tatctggata ggcagagcag 19500 tgatggatgg tggtttagta tctgggtaaa gaagactctg gtgctttgcc aatcctggat 19560 ctctagacta aaggctcatc ccacaaatct gaggaggagc tagcttctct gctgggccaa 19620 accegggett ccaagacete ettteactge etectteaga atecttaagg aagetgtgge 19680 tcgagtactg ggttctctca agacacagag gtggctgaga cacggcctcc ccaaccctcg 19740 tgaggaacag cttaccagtc agtaaggaaa gtttttgcag agtgaacgtg cttaggaggc 19800 aggcactgga ctagaaactt ctataacagg cttgctccac cctcaggttg gacatcatgt 19860 tactgagaac tctgagccat agcagtcctg ggttgcccta acctgtctga caaatggaag 19920 tctcaggtct ccatctgagg tggtgcagcc aggccgccct ggccaggact tgagccacct 19980 gtcctctgtt gcctcccagt ggctctgtca tcttcccaca gcaccagctg agtcacttct 20040 ctttgtgttt gttcacccag cactgagtca gagaactgat agaacgtgtg tccacacacc 20100 actcagtgtg gcagttggca ccgaacacta agggcactgc tggcagaaga gatgacaaga 20160 aataaacgaa gtactcactc atcagctatc caagacacct gcctgcacta taggctaaag 20220 cacagggcac agagcagctc actggctttt cctcagtggc ctgtcaggtt cacatggaag 20280 gaagacagac acaatctcac tctgattggg gtctcaaaaa gctcagaagc aggcagtatg 20340 ttcccagggg aaaatggagc aggttgtggg tccagcatgg atgagaaagt taagtattaa 20400 ttaatggttg taacctgccc tcctggggag agaggctgac accctgcaca gtcctactta 20460 gcaaagagcc ttggaaagga cttcagtggg cccaggatgg cagtccaccg gaagctggag 20520 cacagcacac tggaggtatg gtaagaggga gctggtgcca ggcagaggca tcccagatgc 20580 ataccgcaac agccagtgag gatacccact gcaccaccat gccagctagc cactaaagca 20640 gccagtgagg gcagtccagg tgagaggagg aaggcctgag aggagaaaaa aaatatccaa 20700 aatcctgggg tgggtggtgt cccaaaactg aggcagcata ggcacagtgg gagcagcaga 20760 gacctgcagt ggctcctgct gggaatgggg caggcctgtg aaggagagag ggctgagcca 20820 tagggcactg gtgactcagt gagatggaaa gagggaccaa gtgtagaaca gctggaccat 20880 gagaagagag catgcagggc agttcaagaa ccttagaaga ggccatgtgg gcagagtggg 20940 gctccagaag agggtattgc agtcaatggg agctaggagc ctggagccag atctccctct 21000 gtgaaggtta ttgattatca gtttctgaag gatacaaaac atccactctc actacctccc 21060 caagaccagc aaaggcacca atgagcttgt gttcagggat ccattgtgag gggaaatggg 21120 aaaataaagg aggacgttac cctggtagct gagagtgagc cagcagtccc tgttagactg 21180 gagaaaggca ggtacgaggc catccacaaa gaatgctgaa gcaccgagct gcagtactgc 21240 acagcatcca acaaggctgg gctgctctgg gctgggggtg gagaaggatg gctacagaag 21300 tcagtgttgc cactgtagta aataaactga cctcttccca caccagcagg caagagagcg 21360 atcatcggag agtcaccagg cctggtagaa tctcctgtga taggacccca tgagatgcag 21420 cagagggctg ctgcaggatc cagtcagccc tcaggccttc agcagccagg caggagattg 21480 aaaacatctt ctccggggcc ctcctgtccc cacatgaaat acaaacttgg cagcagagtt 21540 tccccagtga gatcccagcc aggcttctca tggggaatca gcctgccaag tccctagggt 21600 acttgggctt ctagtcactt tgtgagtcct atctgtaaat aaagataacc agggaaactt 21660 ccttttaaaa ggaaaatagg tcctatggag aaaacagatc acacagagaa aatgaagtta 21720 tcactgacat tttcaaggaa atgagagcca tggaaaaaca aggactagat ggctagacac 21780 caaagaaagg gctggtgatg tagcccagcc agtaaaggta ccaggtgcta aacctgccaa 21840 cacgggttca gtcccagggc tcatagcaag agcagccaac tgtggttgct atgtaatgtc 21900 cataaggcgt ctttggagtg ttcaaagtat ctaagctccc atgaaggcca tccagctggc 21960 tgcttggcta atatccttaa acatccaagg ttccagagaa ggatatagtt acagttaaat 22020 ccccctggct cacaacatct taacttattt gaaaaaaaaa atatctgagc atggcagctc 22080 acacctgaaa tctcagcatt tgggagcctg aggcaggagg gttgccatgc attggaggcc 22140 aatctgggtt acacagtaaa tactaatcag actacgtaca agactatgta gatatactat 22200 gtagcaagac tgtcagaaag gaaaaataaa cattaaagag gtaattagag taaacgccca 22260 ccattaactg taatggtatt taatagtgtt caaccctcaa ccaaatgtcc ctgggaggag 22320 ttggattatt ttatgtctca tacacctaaa cagtagcatc agtgcgctca ggattgagga 22380 gcaggccagc accaccaggg gtgagaggca tccgatctag aagatccctg cctgaggtag 22440 ccggtaagtg aagtggctca gagaaagtca agtcacggac agactccaag attagactga 22500 cactaagtgc actgaaaaca accctatctg acagtaagga acgtattggg tatgagtggg 22560 gaagcaagta caagaaagaa aagcetttee etggtettte acetggeaca tetggeaaca 22620 gcagtacatc ctaagataaa cactgagtga gaatctacaa actgctctgg ggccatattg 22680 agaggatgag gagatgggac acatgagtag ccagttcact cttcagtgga aggttctggg 22740 gagctaaagg tggctgcaga ttcattgcct acccaccacc accacacac ctgttcttgt 22800 ccttcctctt gaatcagagc agagtcttca gctgctgagc tcagatacag cggaagtgat 22860 gttgcactgt ctccggccat gctgagagtg ccacagcaga gctgtgagaa agtttgggct 22920 ccctcgtact ccagctcaga ggcatcttag agatgcatgc ccaaccccca cagaaccacc 22980 cagtggtggc cttgtggagg aaacacaaag tctccagaag accccttcca aattacacat 23040 ttctatcagc tttaaaaaaa aatgttggtt gttcagggat agttcatgac ataatattag 23100 cagaaaatgt cagtaaatac agctgaaaac tggaaatgaa gggctggaga gatggctcag 23160 cagttaagag cactgactgc acttctgaag gtcctgagtt caaatctcag caaccacatg 23220 gtggcttcac aaccatctgt aatgagatct gatgccctct tctggtgtgt ctgaagacag 23280 ctagtgttct tacatataat aataaataaa tctttgggcc agagtgagtg gggccagagc 23340 aagtggggct ggagtgagca gaggtcctga gttcaattcc catcaaccac atgatggccc 23400 acaccatctg ttcagctaca gtctactcat atacataaaa taaatcttaa taaaaaactg 23460 aaaaagaaga aatggttgtt ttcatttgtc tgttattctg agaggtgtgg tttttacaaa 23520 tagtggtaac tataaaaaat ttaaaaccca tgcagattgg gggtggacta gggaaatggc 23580 tcagtaaatc aagtgctttc cacacacagg agatgcactg gagctctgat cctctgaact 23640 cctacacaag caggcggccc tggcagctgc ctgacatccc cgcactcaga ggccctggtg 23700 aactgactag ctagactagc gggacccgtg agctctgggc tcagacagag atcctgacta 23760 tagaaagtag aaatcaacca gggaaggggt ctgccttcaa ctttgggatg ccacattcaa 23820 ccacatgete atgeacacae aegeaegeae gegegegege geaegegeae acacacaca 23880 acacacacac acactaaata ccaagagggg acgtggttgc ctccaagatg gaaaatgcat 23940 ctaggagcat gaagtgctct cccattttgt tttaataaac ctgccagatc catttgacac 24000 tttacatctg tgtataattt caatttaaaa aactaaaagt aggggggaag gctgtttata 24060 tttagccaga atggatccac aattggtcta aaagctttcc tgtacattca gcaaggagtg 24120 tattaaacaa tccattattc tagtaactaa gataaaatcc ctgctgacag gcaccctggt 24180 attcccagac cattaaaatg cttccataaa gtctgcttaa agacacaggt agcaggccag 24240 gtggtgacac atcctggctg cctcagcaga ccttgcaggt ctaggtgtgg agcccagagt 24300 gacgacactg taggcagctt gcagaagagc tggccagggg ccttaaagga catcagctaa 24420 aggcctctgt ggaccgaaag cacaggcttg agggattatt tggagtcggg gttgggatga 24480 aaggaattga cacagattaa agaatcaact ccactctggt gggtgccaga acaaaggtga 24540 tgctttgtat aacgatgaag aaagttctag aactaggggg cagctccatg atagaacacc 24600 tgcttagcag gtaaaaagag tcaggttcag tctttggcac aaccccctta agaaggaagg 24660 ttctagagaa aggggtgttc tggacctgag aaaattagct tgaatttgca tataagtaaa 24720 ttatgtttat aagttgaaac tcttaccgtg gccctggaga gtggctcact cagttagtta 24780 gctgctcttc cagaagactc aggtttgagt ccagtgactc acagctatcc ataactccag 24840 teccaeagag atetgataae etetggeete eteaggeaeg eaceaggeae acatgtgata 24900 cacagacata catacaggca taccatgaaa ataaatttta aagaattaac tgtaaccagg 24960

tctgttagca catccctgta atcccagctg ctcaaagggc tgaggcagta ggagagcaag 25020 ttcaagtctg gctttggcta cagagcctgt gagttaaagc ccaggcaact tagcaagacc 25080 cagteteaaa acagaaatta taggeaggag gtacetggag ceatagetga ggatgggtae 25140 tggccaggcc tgtgtgagtt ccccaagttc tattctcatt cctgaaaaaa aaaaaacaac 25200 aaaaaaaaaa acataagtgg tcagttaaac cttaggataa gataatctct ttgaacctgc 25260 tctgcctttt tgtgagcttt tatgattatc aagggtttct ttctctagta tataaagcca 25320 tcttaggggg taagatctat ttaagtcatt tattttactt aaaacggtca ttttactcaa 25380 gcaggttcat gaacttcact gtgttccaca gtgttcctaa attgtacagt tctggaaagc 25440 agttagccaa ataccaagaa aatgaatgca gaatagagtg aggaacaaag gcggcccttc 25500 agcatatttt accttaatag attttccagc taataagact gctgctggag ggagagtgtc 25560 ctcccggtgc tcctgacacc aagtcacaga agaaattacc gaatgcggca ctggacacct 25620 aggactttgc attcctccat gcccagagaa gcaggtatca ctcagaagga tgacaggggc 25680 tggggaggtg actcagcaga taaggcactt ccacaaaagc ctgatgacct gagttcaatc 25740 cccatcaccc acttttttt tttaaagaga ggaaggagag aactgactgc agttgccctc 25800 tgacttccat gtgctcccca aggcgagcaa cacaccacat catacacatc acaataatac 25860 atttttaaag gatgactttg agctacacct gccaactgtc cctgatgctg ccaccactac 25920 aactagacag aggaggtett geetggtggg taagtgaaca gteaagggtg eecaeggaga 25980 gccacttctg ccaggcccac tcctgaactc ctaggtcctc acgggctcag accctcttgc 26040 ctccgctgaa gctgcagaag ggactcagct gtgcactgtc tcctccccca gggaccatgg 26100 ggcgtggtga gggaaagggg actgtctctt gccttggtgg tagatcagtc tccttcctgt 26160 totcacacca gagoccaggg attgactcag gtgatgagag agtggagaaa ggatotacac 26220 ccagcccccc tctaagaccc catagcagcc ccaggacata agtacagaag agctgggctg 26280 ggctatgcat ttgctttata catttgagtc aggaaggtgg gcttatggta cacagctgag 26340 caaggaggca gatttagctc atctttataa gaggtctctg taggggagca gtcttaggct 26400 gcagttatcc cagaggagga agctgatagc ttctacatgg actgttaaaa tttgcattca 26460 gaccagggaa aggetttgee acceetetga getteaetgg ggaaggette gecaeteeat 26520 gggcctgatg cgttggaatc catgacagct cagcccatgt caacaacaca cattcactta 26580 gggtttcatc tgctcctttc atgtaacaca aggctgcttc tgctacgtgt ggggatttgg 26640 agagtatatt tettgetgga aatgaatgat caaagcaagg ceceacetee taggetetat 26700 caggatagaa qqgtcactac cagaatgagc cacctcctca ctgacggttg gctccacttg 26760 caggeettee aggatteeaa gaettggtte tttgttetga ageteagggt atagetteet 26820 ctacctccac acacagcccc taacccttca gtgcatagtg aaccactaag atctcccact 26880 atgtccccat agcagccctg gagtacaggt cctgtctctt gcccattctc aggtgagaga 26940 acctaggete agagagatga cactteagaa gataateaga aaatggtgga ggtgattggg 27000 ageteagate caaaatgeac tgeatttett tattagatat ttttaattet aaeggtgtac 27060 ctgggtgttt gggctgcatg tgtgtctgtg catatcaccg ctgtgcctgc tgcccacaga 27120 agccagaaga gggtgttgga tttctttctt tcaattagta cttctcaaaa ttcaactatt 27180 catgcatcac tttaatgatt ttttttttt tgccatagcc acataatggc ctgtggtcat 27240 atttatttaa tgtttttcat taaacaagct taggcctttc cttgaaataa ttagaaagga 27300 aaacttacag ttaccaaaaa atagagggcc agctgggggt ttagcaagag ttggtacagt 27360 gttcacctcg tatgcacaaa gccctggctt ccacccccag tacccagagc ttgggagagg 27420 aaaggcagga tcaagagttc aaggacatgg ccaggcatgg tggggcatgc ctttaatccc 27480 agaggcagac agatctatgt gagtttgcat tcatcctggt ctgcaaagtg agtcttggac 27540 agccagggct ctgttacata gagaaaccct gtatcgaaaa ataaaaaaac aaacaaacaa 27600 caacagcaaa agagcttaag gtcatctctg gctgtatagc aagtttgagc ccggctgggc 27660 tatacaagac catcttaaga gggaggagga aggggaagaa aaagaggaaa caagaaagga 27720 gataaaagaa ggtgggggga gtaaccagaa cgcattatat aaatgcatga aattgtcaaa 27780 gaactaagtt aattaaaaag caggaagacc accatcacca gcctcgagta gaaggcagct 27840 gtgtatteta agectgeaaa tageagtgtg agtetttget eeggggetet getteaaaag 27900 agatggtaaa gttagtacaa tgttagagaa tttcaggaac caactgcgat cctttcctcg 27960 atatcatcaa aggggtggag agagagacca acaacgctcc atagcacagg cccatcactc 28020 atgtgcctga gaagctggag ccaaggatct gtctcttcaa gactccatct caataatggt 28080 tcagtgacat tttatgccca ttggtgatag ctaaactagc cccatttcac ctaaaagccc 28140 acacctggca ccgtagtttg tcctgtcttg caaaaaatgc cggtcaagat ggagataaga 28200 acceptage gaacagatge atetgatete agteacactg ceaacetatt cetteeteet 28260 gaggcagete atgetgagga gtgetggeta geaceagtgg tacacagetg aagaceatga 28320 ctcgccttct cccagaattc ccagcaagag gcattgagcc caataagtcc cccctccagc 28380 catgactaat tittgacagt giccatciic tgatagccci tgaaggiaac tacagciict 28440 gtgagtttat gattgtgatg actgtggcat tgtcaaagga tggcatttgc aagtcctctc 28500 tgccttctgg cttgcatttt ctcttcttcc tcccccacct tgttccccaa gccttaggag 28560 agtggcatct gtgtcttgtt cagagctgag cactcagcca ccatttcttc tcagtgcctg 28620 ggcctcacat gcagtccttg ggcagtggtt ggttggtcca gtaacaaata ggcatgtctt 28680 gcctagcagg tcttatctag ctctggtggg tttccaagca tgtagcaaga agagtctgca 28740

ctgttttggg agtctctgga gcatccctga ccaatgactg acatggaagt gctccaaacc 28800 tectgettet ggggtttetg tttagtaace cacageetet aggaacagtg ttatecagae 28860 tataattgtg ctacaatata gtaagtttac acacttgttt tggttaacca cccccacccc 28980 atcccgtctc cccacttctt tctctaatta aatctttcca ctccaaagag cattactgct 29040 attgcagaga acatgggttt gcttcccaga acccacttgg cagcttacag ccatagtaac 29100 tacagttctg gggagtccag tacccccttc tggcccctgc ctgcaccaga tacacaca 29160 cacacacaca cacacacaca cacacacaca catatcatac acttagatac ctgcaggcaa 29220 qtcttcaccc tctctqtttt cactttatct gtgtcttgct atcccttctc ccttaaaggg 29340 gagacagact cctagtttcc tggcttccac aagtgctcca aggtaagcat gcataactaa 29460 agaatcaaag ctaagtaagg gctggagaga tggttcagtg gttaagagca atgactgctc 29520 ttccaaaggt cctgagttca gttcccacat ggtggctcac aaccatctgt actgagatct 29580 ggtgccctct tctggcctcc aggtatacat gcaggagaaa tgctgtatac atgataaata 29640 aatatttaca aaaaaagaat caaagctaag agccatatgt aaggatgtaa cagcatcttt 29700 ctgggcctga gcaacactat atatattttt ccagttccat atgtttacct atgaataaaa 29760 ttcataagta tatatgcttt gttaaaaata acaaaacatt tcaggatagc cagggctacc 29820 ccacaagcag tccaatcaat actgaaacgc tggttttgca agctaccggg gttttaatca 29940 tettaacgtt tettetett tecatette caettette etgecettet teagettgag 30000 ctttcctcgc cactgacgtc agcettgtcc tcctcacatc tctcttccca ctgcaggcct 30060 catectegaa cetteetet accettetea ggeteetete ceeteaceat ateacecaca 30120 gcatcaccct tctgcagccc agtcaggacc ttcctggtcc tctaaagtca gctgggggag 30180 gggcttgcag gcctcaggtt agtcctagtt aaacagagct agccttttca gacaactgat 30240 ctccttcaaa agacccaact actgccttcc gtttccccgt aagttcagat gttaacctgt 30300 ccagaccttc aaaagtccta ctgcctctga gcttgagctt tttcagtgtg ggtaatgggg 30360 aattttggaa ctgaaattaa gtctacactt aacaaaggaa ggaactcttc atctacaaat 30420 tragccarca greageettt reggtttera trattteatt tggatratet agaccaagtt 30480 ctggaataat tgcttaggtc ttcccccacc cccacccca ccccacccct ggcctggtag 30540 atccccctct ccacatccct gttttccttg ttacttctct tcagatttag ttttccgtga 30600 ggcaagagtg gagaagggag agatgtacta gcctgtgctc ctgtgtcaca ctcttgctac 30660 tcaqttccac tcttaaaatt tctgqtccca gaggaataga gatgacctca catgcaaccc 30720 tgccttgact acttttctat tgctctaagg aggcaacatg gccacagcaa cttgtaaaag 30780 catttaattt ggggttgaca gtttctcaga ggttgaatcc atgaccatca tggtgggagc 30840 atacceggag gcaggcatgg tggacaggca gtegtgggat ggetetggag etgttgeaga 30900 gcacttattt gctgattgaa agctcaaagc ctacccccag tgacacacct cctccaacag 30960 ggccacaccc cctaatcctt ctcaaacagt tccaccaagt attcaaatat atgagcctat 31020 aggggccatt ctcattcaaa ccccacccc accccgtgg ccctactaag ggcatcagat 31080 agggcctatg gaaaagttat aaaccctctc accaccactc tgggttccag caacccaagg 31140 ccaccatttt ctactcttgc ttaaccaaca ccacccagga tctctcagcc tcagcctgga 31200 atgagggaac cetettgtet etttteatte aacteegtat tetteettea tteeacecat 31260 ggatggaaag attcacccc tccactgtag agtaacacac acgtatgaca agccacttca 31320 ctgccctgca tcttacttct gctctgaagt tctgtcagcc aaaacgtatt gagcactgaa 31380 gactgtcagt tgctgctttg tgtggtggtt acaagttaag gtccgactgt agctgtctgc 31440 ttgctggaga gactgggaac cagtagttgc ttagcccatg gggctggaga cctcagcagt 31500 tecagtgtgg ttetgaggag aacecattee ageageagea gaggtageea caggataget 31560 tgactcacaa gactcatgaa ctcaagaaga ggagagatga acttgtaagc agggtatgtg 31620 agctcacacc tgagcggtga aggcaagcag gtaagaagag cttcccctcg gaccttctgt 31680 ctgggccatc tacactcaga tgggcctccc acttcattta ctagaagcaa gcaaatccct 31740 ctcaggcgtg ctgaggttaa cctaatcggc ataacgcctc ataggtgtac ccagagcttg 31800 tcccgtgata ctagatcctg tcaggttgaa aatgttaacc atctcaaggg tcgtacacat 31860 tccaaaaagg cactgtgttg gctattcttg gttgtcaact tgactacatc tggaattaac 31920 taaaacccaa gtgactgagt atgcctggga gggagatttt cttaagtcat ttgaagtggg 31980 aagacccact tttaatccag aacttctaag gtgggcagat tcacctttaa tcagcctatt 32040 tcaatgacat ggaggatgga agtttgttct ctttgcctgc tagcccttgt tggcaagtcc 32100 atcacttcac tgaaccaaag cctgtaaggc attcttcctt tgtttgttgg gacagggttt 32160 cctgtagccc tggctatcct ggtattcagt ctgtaaacca ggctggcctt gaactcagag 32220 atccaagtgt ctctgcttcc caagtgctgg gatcaaaggt ctgaaccact aataaattgt 32280 gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt acacatatat atgagaggga 32340 gtgagagaga gagtcattct gtaaattctg ttcctctgag aaccctgact aataaagctg 32400 cagactgctt agtatccttt ttgttctctt tggggacaca cacaaatgag tgaacggact 32460 acagtgggca acattettet atgtetggtg getgeeetgg ggetgtttag tecaccettg 32520

tgtgaggact cttttgctct caagtgctgg catctgacct gtgccctttt aaatctgttg 32580 ctaattttgt ctctggggtt ccaagtagag acttttcagt gatctttcct catgatgaaa 32640 atgggtgatc tgttattgga agtccttggc ctaagcaagc tctgatttaa tctaactata 32700 teatgtgete ttetaateta ttgeteeggg teeetgagea ttgetgtaet eatteatggg 32760 tcattttgtc attaatctgg ctcaatccat gttcacaatg atgatttgat aaaggctgaa 32820 aatgtgaagt ggatggtaac agttctgtgc cctggattcc aacaaagaga tgcatgctcc 32880 tccagcccac tctgggtgac tctaggggac ggagacaagg gtcttacaga gatgtcagag 32940 tatetgaete ettgaeaget agtggeetea eagggagaet eateaggggt eaatgetett 33000 tetggtaaga tgaactecag etcaceetge atettgatet gtecacactg ettggtgttg 33060 agacttcctg tagccatgta aagtgggaca tctggcctac tggtgattct ctaagaagga 33120 atttccacca agcaggacac ctgaacactt tcttaacatt gactcttact ttggctacca 33180 aaagaagcct ttgagcccta tgtggtagca cagacctgca atcccagtac tcaggaggta 33240 gatgaggtgg atctggagtt ctaggtcatc cttggttgca tagcaagttt atatttgagc 33300 ttggccttgg ctgcatgaaa cccttgtctt ccaggagaca aaaacaaaaa caggcaaatt 33360 tcccttaaga agctcacact ccgcctatcc actgtgcttg ccttcttccc aatcactatg 33420 gcctcctctc ctccattaac gcccatgctt aaagggtctt ctaaaaatgt cttttagtaa 33480 actccaattc tactacattt aaagaagggg gaaggtgagc cccacatgct acaccccaca 33540 gttecagggt getaggette eggetggggg etgeetettg gtaetgeett geeetggaat 33600 gtcagttcag ctaaaggcct cacacaaaag atgaaagccc tgagtcctct tactgcttct 33660 tagcacacaa gcagtttcct tcactcccct aggtcttagc aggccttcat cttcaagggt 33720 tetettteec tetattetge ettetetgte tetetetete tetetetete tetecetece 33780 tetetetece tecetteete ectecetece tecetteett tettteettt eatttettt 33900 ccctttttgt cccttcatga gaaaaagcat atttgtaaat cccaatttaa aatataaata 33960 aacgaaaaca gtaagtetea accaaatgag geetaaatea geeetggaag attagtaeet 34020 gtttctactc aagttaataa tttactctgt gtccctctgt gcatgcttgg cttcaacaga 34080 ggatetttaa eatgggatge aacttegeea gagagettea gtteteagga ggeatgtgga 34140 catcgtggag gttgaggagg ggcagatgga tgctgggaag caaatggaaa gcctgaggtt 34200 ccaagtcaaa tctgtgactc acgcagtaag gaggtttgag ctggggctgc ccaagggagg 34260 agggctacta caggcaatga ttaagattta tgtatttatt ttatgtatga gtacactgtc 34320 gttgtatagg tggttgtgag ccttcatgtg gttgttggga attgaattta ggacctcggc 34380 tcactctgat caaccccgct cgttccagcc caaagattta tttattatta tacataagta 34440 cactgtagct gacttcagac acaccagaag agggcatcag atctcattac gggtggttat 34500 gaaccacctt gtggctgctg ggatttgaac tcaggacctt ctgaagagaa gtccgtgctc 34560 ttacccactg agccatctca ccaccccctt aaattgttat ttttaaaaact atatgaaata 34620 aactttacca tctaaatggg gaggggtgac cagtctccgc acataggagg tataagggca 34680 ggaagatcag atcttaaagg tcagcctaca tgagaccctg tctcataaaa accaagtaat 34740 taataatagc aattaataat taataataat aggacagcag tagcactatt tggttgctgg 34800 ggatacagct ctagtagaac acttagccaa agggtcctaa attcaatgtt gaggacagcc 34860 aaaaataaaa taaaaagttc catgttgttc ccccacacac acttttttt ttttttgaat 34920 gacteteact atgtageeet geetggtetg caatgtaeta tgtageetag getageetea 34980 tactcaaaag agggctagcc tgccactacc tctgcctcta gagtactaga attatcagca 35040 tgctcaggca cactgggtct tgtttgtttt tttgagacaa gatctcatga atcccccact 35100 qqcctcaqat tctccatqta qtcaacqata atcttgaatt tatactggaa aatggtagca 35160 atctggagag taacaagaca ggagctgact gtgtgtatgt agcccaggat gaccttgaag 35220 cctgccttgg cctacagagc gctgggacta taggggtatc ccactgtgct tgcctgcctc 35280 tatgtaaagg tggaacgaat ttcccctgtg cctgtggacc acgtttctct gacccactca 35340 tccaccagtg ggcgtttggc ttgaccccac atctcttggc cactggggat gatctgaacc 35400 cagtgcattc ttctcaaaat acactgaggt gggatcattg gatcacagac gttcttagag 35460 cctagcctac cccctggggc tacaggaagc tcacagtttc tgttggttga ttggttggtt 35520 tgcccctccc caaacccctg ccacctcccc ccaacctggg tttctctctg tggctctctt 35580 gatgtettea aacteaetet gtaaaceagg etgaeeetga eeteagaget etgeetgtet 35640 ctgcctccct agtgttggga ttaaagacat gtaccatcgg ctatacctac agacgtgctc 35700 aaggtatgta cagagcactc accctggcat cccttcacct gcctaagaga ctaaggatca 35760 gaagtaaacc ctacctgctt ctctggaaga ttcaggtttt cctcagggta ctgcagcctc 35820 tcaacctagc atggtctggg ccttatcctt acgaatgtac actcaaacac aaagacaagg 35880 ctctcccagc ctgccctaat aactttttc accaaacagg tcatgagtca atggtgcccc 35940 gatattgtct aggcaatagt cattctggga ctacaggcct tggtacccaa catgactccc 36000 tcaaagccaa gattgtgagc atgtcactga ggccactctg tgagcttgtt tccatgtcaa 36060 cggageteat gatgteagaa ggetgaatee agaceetgea eecaggetgt gtgttteeag 36120 ctccacccca gagcatatcc cagtccagct ggctctttgg aaccattaaa gagtgatagg 36180 tgctgactat gtgtgcagag agtgatecta gcagcacagg acacaaatcc tcaccctggg 36240 gaaagcagcc ttcaacctct cacccttaag gggaagggca accatggaac agcatctgtc 36300

```
agccctccct cacaaccccc caggctggcc tagccacacc ctgccacttc tatccaggca 36360
gcagggcttc ctttccagag caggggggt ggggtcaggg aggagcctgg ggattaggga 36420
gggacactga gttcttcaag caagaactgt tccccatcta aggccatccc ctcctccagc 36480
cccagctatg cagggagcct ggctgctgct gctgctgggc ctcaggcttc agctgtcctt 36540
tggtgtcatt ccaggtaagg aggctcccct aactgcttgt ccccactcac aagcacagcc 36600
ttccactgac acctgcctcc ggtctccccc ttggccagtg gaggagaaga actcggcctt 36660
ctggaatcaa aaggcgaaga aggccctgga tgttgccaaa aagctgcagc ccattcagac 36720
atcagccagg aacctcatca tcttcctggg agacagtgag tgtgtgagca cggcctggcc 36780
accctggggc cccctgagct ccaggcatcc attgatgtgt ccaggaaagc ctggtgttca 36840
gatcgaacca gattctgttt ttgtagggtt gggggtgccc acggtgacag ccaccaggat 36900
                                                                  36901
<210> 7
<211> 13330
<212> DNA
<213> Homo sapiens
<400> 7
gatccaccgc gccttccccg agcaggccct gctgcgccgg caccccccgc cccaaacaag 60
gatgctcagt gacctggtgg aattctgcga ccagatgggg ctgcccgtgg acttcagctc 120
cgcaggagcc ctcaatgtga gtggtgggca ggattcgggg gaggccctgc ttgggggaaa 180
gaagagaaag acctggaagg tggggtggtc cagcggcctc tgcttccccc cagagtccct 240
ccccttcagc caggtctctc ctgtagggaa ggaggccctg ggagaaaggg cccctctgag 300
tcacaggggc cctgacagtg ggacctgccc cttcaccagg actgtgccaa gcggggggac 360
cctggaggcc tagcagaggg caggggtcct gtggccagaa agggctggtc ttgggcccag 420
aggettteag agtegggget ggaattgtag gaateeeggg aatgtteetg gtgggtaett 480
tcaggtgctc cctgcctggg gcaaagctaa gaaacccagg gccttggctg tggtcctgga 540
ggagggagac atctcaccca ggcccaaccc tgggagggga aggcaggtgc cccaggccag 600
agagctggag cccagtgagt ccaggccagc cagcaaaaac atggaagtgt gggccacagg 660
gtgtgggcgg ctgcccctc tccccaccca tcccctctga gcagggctga gccccacagg 720
caactcctcc ccccagagcc gggcatgagg tgctcagcgg atgacagggc ccagagtctc 780
tgcccgagct ggaccacacg tcacataggt ttctgggatt tgcttctaga aaagcctgac 840
ccaaacattt ggagatgaca agtactcact ggcccgcaag gaggtgctca ccaacatgtg 900
ctcccggccc atgcaggtaa ggagggccca gccccggcct cccctgctcc caggagcaca 960
ctagccccag acctgtgacc tccacgtgca agcacaggcc cccaccgttc ctgcctgctc 1020
tggacatggc tgggtggacg ggggctgctc ctcctctgcc agagggtggg agaggaggcc 1080
gaccccaggc agcacctagg agggggcacc ctgagcctct tgagtttgag ccgctgtctc 1140
ctgctcacac tcgctcaagg acagagtgcc ctggagctga ggggctactg agacctcctg 1200
tcaggctggg gtcctggagg agagacaggg tcccatgtgg tttcctgtcc cagggaacac 1260
teegeageet ceateceeae atgtggagte cagaactage tgteageete tggecagtgt 1320
gggaaagaag cggacttggc cgggggccta ggcctgggcc tgcagggagg tggcagcctg 1380
tggggtggac agctgggctt gctctgggat gcctgtcaca gcgccccagg ctgagcttcc 1440
cccatgcagg gcccgagcat cctgggacca ggaccccaga ggaccctcgg gtcagcggga 1500
gcagtggatg ctgatgggtc ggctctgggt cccacccgg cccaggggca gagacaggct 1560
gtattttagg ggctcggtca ctcggcagat tcaatctgtt cacaagaact gatggcttca 1620
gctgacctca gtggatttat tttctgacac ttcaagctct gctgggtttg aagccatcag 1680
ggcctgcttg ggcctggtca ccgtgacctg ccccagtca caagtgtctg cccagccaag 1740
cacctgtggc acccacagcg gagaggggct gggccgtgcc cactgggctc tctctgttct 1800
acactgcagc ggctctaggc ctggcagaga aggcacagca gcccctgagt cccagaactg 1860
cetetggete tgeeetgetg gggeeeetee catgteeetg cetetgaege cateacetee 1920
aaggaggtac aagccaagct ggagctccag agatcggagc cgctccggag ttagccagag 1980
cccgaaaagc ctgcattctc ctggctcgcc tcccagggag ctcagaggtg cccttgcccg 2040
ggaatccgat ggcagagagt taccaggtct gcggtgctcc tgttcctcag ccccgggaac 2100
 tggggtgggg acaggcagg gcagcagcag agagcacaga aaggtgtgag ggggcacaca 2160
gtccccagtg agcatctgca tcaggacacc agggctgtcc gagggctgtc ccagggatgg 2220
 ctgggcctgt gggaaagcca tggtccccac ccatcccacc cgaccctgag ccacctccac 2280
 cagccaagag gggccagggc ccttcatcaa cctcacccag gtcatctggg gaactgggcc 2340
 accactgaga acaaagccca gacatgtctg ggagtggagg ctgtgcccac ctcccccaga 2400
 gacttgcccc cgacttaacc cagggcccag caggggctgg aagggaagtg gagttaggga 2460
 geggageagg teaccateag etgegeeetg gatteeaggg eeegtgtgea eagagtaaeg 2520
 ggagccggct gtctgtctgg ccaagggcac aggagggtga gtgtgtacag cagccaggga 2580
```

gcaagggagc cagagagaca tacaggcgtg accttggacc tctgcgagga acccgttcac 2640

tcgctcccag gcagtagcac tggccctgac acccagccct gaaagctcgg ggactgcagg 2700 acaaacagct tcaggggctg tggccccagc tgggacgggc tatgcgctgg tccctagaga 2760 ctctcggtat ctcccctgc cccagtcctg cctcctgccc agcacaaggg cctttggaac 2820 tcagccctct gtgtctcagc ccccgggagg gtcaggtgtc agagacgaga agggccgagg 2880 ctggcaggcc ggaaactgcc tcccttgact gctgtggggt ggagtattgg cgagcacaga 2940 ggtgcccggg tgaagcgtgg cttcagctgg gcgggatcag tgccagaggg gatgaggacg 3000 gccccgacca aaggtgggcc taggctggag aggaagctcc aagagcctga ggcccgtatt 3060 gcacagggca ggggatcgca tcctgggctt tctctccctc ctcccactct ggccagatgg 3120 gaggatggac gttgcctcct tgaacaaaga cccacaggct ccttggcttc tgcttgtgtc 3180 tccagcagac agcgtctgca gcccctggtc caacaaaacc gcaggcggcc tcctcctctt 3240 cetectecte attgteetee tegaceacea ceaceteete ettecaceae etceteette 3300 tectectecg etgtegeete etectegtee tectectect cetectegte ageagtegea 3360 gesteetegt estectests steatesgea gregestest estectests tgestesacs 3420 tetgecateg ceaegteete etecteetee eccaeeceee geegetaeet ttettette 3480 ttccttcttc ctgggcgaga gtagcagccc cggccccatg ctggggaagg gtaggccaga 3540 gactettece teetggtggt geteageagt gacteageag ggactggaet teggaggete 3600 agetegtgee ecetaceetg acageateet gggggtteet ggeteeetgg teeteageag 3660 ggtgggcttg tccaggccat tctcagtgct gccaccttga gggcatctgg gaggcccagg 3720 caggccagat ttgtctcctg gaaaggacat gggtacccct gggctctgcc cagcctcctg 3780 geeteeceet ggggeecett gtgeageaag ggeeetggee ceagteetee etggegteae 3840 tcagcaacca gcagcccatt aggtctgtcc acacatcgct gccgacggtg aggctgtggg 3900 tggtgccagc cttccaggcc tggctgggca gctctgggct tgtcaggctc tgacccatcc 3960 cgtcccgcag atggcactgt acttctgctc ggggctgctg caggacccag cgcagttccg 4020 gcactacgcg ctcaatgtgc ccctgtacac acacttcacc tcgcccatcc gccgctttgc 4080 cgacgtcctg gtgcaccgcc tcctggctgc cgcgttaggt gaggggtgca gtcggggtca 4140 gggcagacct gggccagctc agggctgccc acccccacag tgggtgctca gtggcccaag 4200 accattctgc cgtgacagcg gaggtccaag ggtcgggcga cccaagtgca ggggagcctg 4260 gcctggaaac tctccctacg ggccggtgct gcagaagctg catggagccc acagccagcc 4320 ctggacacag ccgggaggag ggcgctgacc tcgaagggcc gctttctgct gccctgggag 4380 ctgggtgctt ggggtcctaa tctgtcggcg ggggtgcagc gccatgcagc ccatccccca 4440 gccatagete tteccagece eccaggetee caeteteatg ceteacece tetteccagg 4500 ctatagggag cgactagaca tggcgcccga taccctgcag aaacaggcgg accactgtaa 4560 cgaccgccgc atggcgtcca agcgcgtgca ggagctcagt accagtctct tctttgctgt 4620 tctggtcaag gtgagccctc cagcctggtg cccctcacct ccctctggct cccgaccctc 4680 ctgggcacct gctcaccagg aggcctcgag gagcccaggg cagtgccagg aggtgccatg 4740 gctgcagcac tgtccctgca ggagagtggc cccctggagt cagaagccat ggtgatgggc 4800 atcctgaagc aagccttcga cgtgctggtg ctgcgctacg gcgtgcagaa gcgcatctac 4860 tgcaacgtga gtgccctggg agagcccggg ggcgggcagg gcagcccaag ccatcccgca 4920 ctggagggc acaggctgtg atgggtcaca ctccacccct cgctccccca gccctagcac 4980 aaagcccacc tgatgggcct tgctgagacg cccagctctc ccacctggga tggtggctcc 5040 aggcccaggg tcaggcctgg ccccttccc caaggaccca ggaaccagag agcaggcccc 5100 tccatggcca gtacagctcg gcagggtgtg caggctttgg ggactgtgtt tataggaacg 5160 tgaaggaatg aaaggccagc gaatggtccg tggccgcttt ggaaactgtg tcccctgaag 5220 acaaggaaga gagctgtccc tggctcggct cctgccctga gtgactgttg actcacagtt 5280 ctctctccaa ggggacatgg gcctgtccta atgctgcctt aggggcttgg ctccagctgg 5340 ccctggggtc tgcaggtcac cacctgcctc tgtgcctggc tttgaatttc ctaacatcca 5400 gagtgccctg ggagtacagt gtccagcccg ttgtgtgcag taaacgtggt gttcataacc 5460 gggagctggg cagaagagga acgacagagt ccccctgcgg accctggggg ctctgtatcc 5520 tgaagttcaa gcctagctca ccctgctgtg ggcccagccc tgcctgcact gacagatggc 5580 accagcaggg ggcgcagcgc tecgccgcca cagttetetg tececacete agtgcagtea 5640 geeetggace ecceaceact tgeeceecat ageacacaga geeaegggee tteecageee 5700 ccaccctgg cccttggtca ctctcacctg ctgcctcagc tgaaggtggc ctggcagggc 5760 ctccctgaag ctccctccag ccaggcaagg gtgggccagg gccgagggct gagggccgcc 5820 tccaagcatt gaagccctcc agggtggaag ggcaggcagc agcatccaga gctgaggcct 5880 gaggettggt gtttgcacte caggeactgg ceetgeggte ceaceaette cagaaggtgg 5940 gcaagaagcc ggaactcacg ctggtctggg agcctgagga catggagcag gagccagcac 6000 agcaggtcag aacccctctg tgtcccagcc ccctaagtcc tgatgacccc tctcctgcct 6060 cctgcggtgc ccctcattcc ttcatctgtg tcccctgggc tcccccagca ctgcagcctc 6120 ccgggtgggg ttttagggcc ctcccagctc acccagaccc cctcctgtgg gtcctgcttt 6180 ctggcaccac cttcccttcc ttgggggcaa ccacagtgga gagaggaggg gctctgcctg 6240 tecegetaat geaggggtge tggeetteta gggteettta gagaacetga tgaaagetat 6300 gagtttacac ccaagaaatt gtctggaacc gttttcacca acagtgtgcc ctgaacgcgg 6360 acccaggccc tcaggttgtg tttcataagc cttgggagcg ctcaggatgc atctgactcc 6420

ccaactctgc cctgacccag ggcattcttc ctggaggggg cccccattac agacaggcga 6480 gcagaggctt ccagaggccg aaggagggc caggggtcct gctgcaggga tggaggcaga 6540 gctgcgcctc gacatcaggc cctgccatcc ttgtcccctc acggctgggc tctgcacagg 6600 tcatcaccat cttcagcctg gtggaggtgg tcctgcaggc agagtccaca gccctcaagt 6660 acagegeeat eetgaagegg eeaggeacee agggeeacet gggeeetgag aaggaggagg 6720 aggagtetga eggtgagece gaggaeteaa geaceagetg ageteeacea geegeetgee 6780 ccgcctgccc cgcctgcctg tcccgccaca ctggctttag gacctgttga cacggagggg 6840 ggtttttaat ttggttttta acaactcagg ggtttgtttt tatttttatt taatttttgc 6900 agctcaactt ttaaacaaac tgcaggggag agggtggggc tggaaggaag gctgaggcct 6960 ggtcagcagt gaccccagca gagcaggccc cagtcctcct gggaggctgg cccccctttt 7020 ttctgggccc tactgccctc ctctgcccag gaaatggggg ggtttcagca actcagtgtc 7080 acagaataaa atcaagtgtg gagtgccatc tggtgtgtag ggcgcctctg ggaagcctgg 7140 gcagcagaat gccccttgca cccagggcaa gggacccagt tcaggcttca cccctcgctg 7200 ctgagccgat gtcaacacct ggaactttcc tgtcagttcc aacacgattc agagctggct 7260 gcctggcaga tgattgatac tggagtctca ttctgcctga ttaaaaatgg aattagtatg 7320 caacactgag agcgcccca tcaccctgac gaatgtgact gtgtctgacg aatgtgactg 7380 tgtccaaccc tgccccact tcctctctgc accagctccg cagggcctgg tgggagtcat 7440 gggtcctgtg ataccccctc ccctcagttc ctcaagcagc actctgtgag gtcctgtgcc 7500 cagetetggt gtgagtgggt geeeggeag caecaaggga geetggacag aggageegge 7560 ctgggcctgg gggaggggag gagggccctc cagtgccttc caaaccagga ggggaaactg 7620 gctgctggtg acacagcctg ggtgacacgg atcccacctg cctcagtccc gagcagagct 7680 ggctggccac tgggcagtcc cttccccagc cagcctgacc ccagcctgta ctccttcccc 7740 ctccgtgggg gaagctccgt ggcttggcgt ccccgagagc tgccagaaac taggatgaaa 7800 gccatggtga gcacggcctc tgttcccctg caccatttcc tggggtgtcc ggattaacaa 7860 gctcatttga tctggttaca gtgaattttc ttcaaagaaa cactcaatag ggtcccttgt 7920 cagagtgcct cgcagcgaca gtgactgggt actgctgcct ttgtcctgcc accgtcagac 7980 ggggctggct atgggaggca accaaagaca tcccgcacct gccctgggag cctttccctc 8040 ctccagggct cagccacctc aggcggcctt ccgtctgtgt gtcctgccac ccccgagatg 8100 teccagagge caeggteace ceatetgtte etgteceeag aacettetee tggageeaag 8160 tatctgcagg gacagacagg cgagcgtctg ggggtttggt gttggggtgg agaaggctgt 8220 ggggtgctgc cccagcccag gcagcctgac tgtgagagcc ccaaacagga gagccccaaa 8280 caggaaggac cagggccctt cccctcccct ccatgctgcc caccctctga ggagcagtgg 8340 ccaagttcct ctctgggctt ctcgggccag gctgaccctg tccccaggg cctcccacga 8400 agcatgggag ctgttccctc acaggcagca cagacccgga cggacacctg tccctatgtc 8460 ccagcgcccc caggccccag tgaggagtag ccaggggggt gaacaagggg gttcctgctg 8520 cctgggcttg tttgggaagc agatgctggg ctcagagttt cttcagagag cctcaccttc 8580 cgtgctggcc ccagagcatg gcgggtccct ggagctgtgg aggccatggc agccccagcc 8640 caccccaccc catctgggga agtggaaacc gtatccacga gggtcaggtc aggtctctgc 8700 ctccagtgac ctggcaaggt tgtgcccagc caggacctgg gctcaggccc aggcagccgc 8760 cacaccctac ccagagetea gagaaggeag eccageette teeccacace agteacaceg 8820 agccccgcgt ctgcattcac tcctttaagg aacatggttg actgaatccg gtgccgcgca 8880 ttcacaggat ggctctccat gggtccactg gggcccagcc tcttatgtgg cccctcgcta 8940 aaaggactca acagaaagag tgaccaggca ccgaccctca tctaaaggag gacttggcca 9000 ttccctgggc tgtcccacag cacctgccgg ccagggcccg ggcacagagc gagactgtct 9060 tttcctcaag gagacaccgt gggggaggga gggagaggta gacaccacca acctcattcc 9120 atgaccaggg cctggcgatg ctcagaagcc agtgagtgtg tccctgccct gaagggtcag 9180 tgctggcccc ctggacctag ggggaagatg gtgcaggcag tggcccagcc tgaggaagga 9240 gctgaagctc tcaagagttt gcagccaccc tcctggggag agactgacgc ctccccagtt 9300 cctgttagga aggacctcag gaaagaactg gaattacaca gcctggggtg gcagcctcct 9360 ggtccctgag gaggatgtca ggccgcagaa gggaggaacg ggcatgaagc ttgggaagcg 9420 ggcgccagag gaggcgaggc ctctgcagaa gcagcaccag aggccactgc agcggctcca 9480 ccacccagca gcgccgccag gaggcaggaa gtgggaggcc aggcaggagg ggctgtgatt 9540 gcccaggtgc caggaggaag ggctgagagg ggacagtgca gatgtccaga gaggcctgac 9600 agggacaggc tgcgaaagtc acgggtgggg atgggcttcc gccagagttg tgtgtggcct 9660 gaggacagtg cagcaaggag gccccatggt gagcacatgc agccgaagtg acaggttggg 9720 ctcctttgtg ggacaagagc ctctccaggc cactgcaggg tgttcagaga acaaggccta 9780 caaggatctg ctgtgcctgc agctgggcag tagaacactg agcatgcagg gccggggtgg 9840 gaagcaggaa agccacatgg acgagagac cgggcctgcc cagcagtgcc ttttgggagc 9900 gcaggcagga tgggatgtgc agctgtgacc tgcccggcat agaactccgt ctggctgggg 9960 agaggaggtc tcttctagcc agaatggacc aggaggtccc gggaggacct gggaggaagt 10020 ggattgagtt gggccttaga aggagagcca ggaacaggcc aggtcagggg agctggagcc 10080 tggctaggta tggagagagc agggtacact tgctgcaact gtgagaagag ccaggggtgg 10140 ccctggtggc ctgggcgcgt ttagctgtgc ctggggccag gcctgactgg ctgcaagtca 10200

```
ttactatagg cggaaagtgc agagtagcgc gctcctgctg tcactccctc ctccaagtcc 10260
acaaagaggc aagaaaggga ggattttaag gcctatccat accgcatggc aggtgagagc 10320
agaggagcaa acagcacttt tggatcctgg aaagcagaag gtgagtgtcc caggcgtagc 10380
tgacctgaga aaggcgactc caaagccagc agcagcaaca gctggaactg ccccagcctg 10440
caccacggga cccccagctc tgagactgag agcagctctg gggacctctg ggctggggtg 10500
aagagggatg gctggaatca ttgttgcaaa caattcagta ggcaggcagc tccctagatc 10560
ccaccgtggt ctgcagaggc cagcacctgt cccgacctct tactggtcgg ccctggagag 10620
ccatctccta cagaggcaaa atgaacggtc tctgggccag gaccaggcct gttcaggggg 10680
atgtgtgget aagtgcataa gggatgetga gactacagee etegtgeeca ggeagegete 10740
agggcatgga tagccaggcc ctccccatcc aggccagaga tgggaagact ccatccaatc 10800
tcattccatg accagggact ggcaaagctc tcagttctct ctccatccca gcaggagaca 10860
aagaacccaa cctcagagat tcctcaactc ggagacccag ccaggccacc ctccagagca 10920
teteagtetg caageceett ggtgtgetea gagetteeag teacaetget catgeetate 10980
cgtgcacagc cagggattgc ccttcgtgga ggaaaacttc atgaaacaaa aaacaagctc 11040
cgtggggaac acagaccata gaggaaaaag aaagctgtag aaaaagaaat gatgaatgcc 11100
ttcctggagg tgagaaagcc atcgtgaaac gagaggaggt tgctccaaaa agttcctaga 11160
gagcaaaaca agggcccttg gaggcacaat gattgccacc gtggagacac atttcagcgc 11220
cactagagta aaaacactgc agacaggtga gctctcaaca gatacatgtc cctcgccttc 11280
tcaggaaaga tgggcagtaa tgagggcaga agccacaaag aggaaaccgt agtgacagga 11340
cccagggtcc ttcaagctgc ggtggggcaa gcgctcggga cagtggtgag ggagcagctc 11400
agccccaggt ggtgcctggc aacccgcccc gggacgtccc acccagggca gcagtagagt 11460
gacatggata gaaagctgaa ttccccagaa gagcctggag gacattgaag tacttcgcat 11520
agageetegg gttggattag tagtacatae agaatgatee acatgtgaag ataagaeeat 11580
gattggctcc agagaaaaca gcagtgcaag caagaagagg tagctagtca cagtttacga 11640
tctggcaata gcgtttacac agtcatcacc atagaaatgc cgagtcagga tctagtttac 11700
tgcagaactc tatcaggagg actggaagat ggggacgctg tccacatgca gggaatgcag 11760
ttggtgaaat ggaagctaaa tgctcatttt cctcagtggg aagctgtggc ttgaagatga 11820
ctgtaaactc tctttccgcc tcttcaatct tgacaggccc cagggctgct aagctaatat 11880
ggcagaaggg acactgtgcc agttgcaggc ccaggcctta agagactggc agcttcccct 11940
ctctgtctct ggaaacctac ctgcccttct gtaaggaagc ccaagcagct ctggagaagc 12000
ccttatgqag gggcccactc tcagcccaca gccagcacca gttgggcagc cacgcagacc 12060
cccaacctqc aagccaqqcc cqctqaqqcc tcaqtacaca caggcagtcc catcagccct 12120
gcccagatgg cagttttgtg atcaaaatat agacgataga tgattgtttt ttaaggttgt 12180
tgggggtagt ttgtcacaca acgatagata atagaacatc agtaggctgt gtgtgtgtt 12240
gtgtgtgtgt agcatatata tatacacata tacatatata cacatataca tatacacata 12300
tatacacata cacatatata cacatacaca catacacata tacatatata cacatatatg 12420
catatataca catatataca tatatacaca tagcttcaaa ttcagacatg aagaagtatc 12480
ttatttagca acagtggtaa atagtaaaac accaagagag aggaaagtgg ttgcctcaga 12540
gatgggaaaa tgcaaggagg gagacggaac tgctgtttgt tttaacaaac cttgtagatc 12600
tgtttgatac tttaaactac attcacatat aacttggaca aaagtaaaaa ctgaagttga 12660
aaaaaatgta ttcatgctaa tagcacagga atgatccaca attggattcc aaggcttctt 12720
gtacattcag catagggtgt atgaaagagt ccactattct agcaacagat aaaattccta 12780
ctgacacgca acctcaggtt cccactcgtt tagaaggctg cgtatggtct tctacttaaa 12840
gcctcaagta gcagtcatgg cagtgacaaa tcctcattgc ctccatagaa cctctaggct 12900
catgtgtgag cccaggctgg gctggggccc ctgggagccc agggtgaggg gccagtccct 12960
gggcagctcc gtgagccagg agcagctgtg ccacctgggg aagggctgca cggtcgatgg 13020
gtcttttctg cagaagagtg tgccccagcc cttgctgggc acagatcaaa gaggtgttca 13080
tgggtcgaaa tcacagattt caagggctga taggagtcag agtggggggg ctgggagggc 13140
tgaggcaggt taaagatttg agaggggctg ctgtgtccac agctgcatca cactgctctg 13200
ctgtcccctc catgttcccc ggcactgccg cctaccctgg ggtcttctgg aagtaactga 13260
aggccccctc aacctggctc atcatcaaag cagactgttg actagctgca ggcaaatatg 13320
                                                                 13330
aagaggctat
```

```
<210> 8
<211> 3100
<212> DNA
<213> Mus musculus
<220>
<221> CDS
```

<222> (125)..(2734)

<400> 8 cggcgccgcc ggcctcccgg gagcgacgct cgtgacaact gagctgctga aggcaggaqq 60 aactctgagc tgaatagtag tgggtccctg aatctggaga gaagacgcca ccttggaacc 120 agta atg aac cat cct gac tac aag ctg aac ctt cgg tct ccg ggg acc Met Asn His Pro Asp Tyr Lys Leu Asn Leu Arg Ser Pro Gly Thr 1 5 ccc aga ggt gtg tcc tct gtg gtt ggc ccg agt gct gtt ggt gct tcg 217 Pro Arg Gly Val Ser Ser Val Val Gly Pro Ser Ala Val Gly Ala Ser cca qqt gac aaa aag tca aag aac aag tcc atg cga ggg aag aaa aag Pro Gly Asp Lys Lys Ser Lys Asn Lys Ser Met Arg Gly Lys Lys 35 age ata ttt gaa ace tae atg tee aag gag gat gtt tea gaa gge ttg Ser Ile Phe Glu Thr Tyr Met Ser Lys Glu Asp Val Ser Glu Gly Leu aag aga gga aca ctt atc cag ggt gta ttg aga atc aac cca aag aag 361 Lys Arg Gly Thr Leu Ile Gln Gly Val Leu Arg Ile Asn Pro Lys Lys 65 ttt cat gaa gcc ttc att cct tct ccg gat ggt gat cgg gac att ttt Phe His Glu Ala Phe Ile Pro Ser Pro Asp Gly Asp Arg Asp Ile Phe 85 457 att gat gga gtt gtt gct cgt aat aga gcc tta aat ggg gac ctt gtg Ile Asp Gly Val Val Ala Arg Asn Arg Ala Leu Asn Gly Asp Leu Val 100 505 gtt gta aaa ctg ctt cct gag gat cag tgg aag gca gtt aaa cca gag Val Val Lys Leu Leu Pro Glu Asp Gln Trp Lys Ala Val Lys Pro Glu 115 age aat gae aaa gaa ata gaa get act tat gaa get gae ate eet gaa 553 Ser Asn Asp Lys Glu Ile Glu Ala Thr Tyr Glu Ala Asp Ile Pro Glu gag ggc tgt gga cat cac ccc ctg cag cag tcc cgg aaa ggc tgg agt 601 Glu Gly Cys Gly His His Pro Leu Gln Gln Ser Arg Lys Gly Trp Ser ggt cct gat gtc att ata gag gct cag ttt gat gac agc gac tca gaa Gly Pro Asp Val Ile Ile Glu Ala Gln Phe Asp Asp Ser Asp Ser Glu gat aga cat ggc aac acc agt ggc ctg gtt gat ggt gtt aag aaa ttg Asp Arg His Gly Asn Thr Ser Gly Leu Val Asp Gly Val Lys Lys Leu tca atc tct act cct gac aga gga aaa gaa gat tct agt act cca gtt Ser Ile Ser Thr Pro Asp Arg Gly Lys Glu Asp Ser Ser Thr Pro Val 195 200 atg aaa gat gag aac acc ccc ata cca cag gac aca aga ggc tta tca 793 Met Lys Asp Glu Asn Thr Pro Ile Pro Gln Asp Thr Arg Gly Leu Ser 215 gag aag tca ctt cag aaa tca gca aag gtg gtt tac atc ttg gag aaa 841

Glu	Lys 225	Ser	Leu	Gln	Lys	Ser 230	Ala	Lys	Val	Val	Tyr 235	Ile	Leu	Glu	Lys	
_			_	_	_				_			ttg Leu	_	_	_	889
												cct Pro				937
_	_		-			_			_	_	-	ccc Pro	_	_		985
_		_			_		_		_	_		atc Ile 300	-	_		1033
						_			_			caa Gln				1081
_			_	_		_				_		gaa Glu			_	1129
	_											gaa Glu				1177
												gat Asp				1225
_	_	_	_				_	_				att Ile 380	-			1273
	_	Arg	Asp	Leu	_	Asp	Ala	Leu	Ala	_	Arg	cgg Arg			-	1321
												agt Ser				1369
												aga Arg				1417
												agg Arg				1465
	_		_	_				_		_	_	ctg Leu 460				1513
			_	_			-		_			gaa Glu	_			1561

	t atc atc c r Ile Ile A 4					
	g atc gaa a t Ile Glu A 500			-		ı Leu
	t tct cca g e Ser Pro G 515					_
-	g cac agc a u His Ser I O	-	Gln Leu	Arg Arg (-
	a ctc cgt t a Leu Arg I		-			
	t gga ctg c r Gly Leu F 5		-			_
	g ctt gta g s Leu Val G 580					a Val
_	g atc ttc c s Ile Phe A 595	_				
	a cca cag a o Pro Gln T O		-	Asp Leu V		•
	g ggg ctg c t Gly Leu F	-	-			
	g act aag a u Thr Lys T 6					
	g ctc acc a l Leu Thr A 660	_		-		a Leu
_	c tct ggg a s Ser Gly M 675		-			
-	c gtt ccc c n Val Pro L O			Thr Ser I	_	_
	c gtc ata g o Val Ile V					
	g cca gat g n Pro Asp V 7					

cac tgc aat gac cgt cgc atg gct tcc aaa cgt gtg cag gag ctc agc 2 His Cys Asn Asp Arg Arg Met Ala Ser Lys Arg Val Gln Glu Leu Ser 740 745 750	2377											
atc ggc ctc ttc ttc gca gtt cta gta aag gag agt ggc ccc ctg gag 2 Ile Gly Leu Phe Phe Ala Val Leu Val Lys Glu Ser Gly Pro Leu Glu 755 760 765	2425											
tcc gaa gcc atg gtg atg ggt gtc ctg aac caa gct ttc gac gtg ctg 2 Ser Glu Ala Met Val Met Gly Val Leu Asn Gln Ala Phe Asp Val Leu 770 775 780	2473											
gtg ctg cgc ttt ggg gtg cag aag cgc atc tac tgc aat gca ctg gcc 2 Val Leu Arg Phe Gly Val Gln Lys Arg Ile Tyr Cys Asn Ala Leu Ala 785 790 795	2521											
ctg cga tcc tac agc ttc cag aag gtg ggg aag aag cca gag ctc act Leu Arg Ser Tyr Ser Phe Gln Lys Val Gly Lys Lys Pro Glu Leu Thr 800 805 810 815	2569											
ctt gtt tgg gag cct gat gac ctt gaa gag gag cca aca cag cag gtc 2 Leu Val Trp Glu Pro Asp Asp Leu Glu Glu Glu Pro Thr Gln Gln Val 820 825 830	2617											
atc acc atc ttc agc ctg gtg gat gtg gtc ctg cag gca gag gcc aca 2 Ile Thr Ile Phe Ser Leu Val Asp Val Val Leu Gln Ala Glu Ala Thr 835 840 845	2665											
gcc ctc aag tac agt gct atc ctg aag cga cca ggc ctg gag aag gcg 2 Ala Leu Lys Tyr Ser Ala Ile Leu Lys Arg Pro Gly Leu Glu Lys Ala 850 855 860	2713											
tct gat gag gag cct gag gac tgaatgctag cccaagccag gcctgtgcct 2 Ser Asp Glu Glu Pro Glu Asp 865 870	2764											
gccctaccct gctggctttt aggaatagga ccttttgaca ccaaagggga tttttaattt 2	2824											
ggtttttaac aactcagggg tttgttttta tttttatttt tccttttatt ttacttttgc												
ageteagttt ttaaatgaac tggaaggtta ggggteaggg caggggatge tgaggeetgg												
cctgtgcttc cctgagcaga gaggatccca gtcctcctgg gcaggcagcc ccgcttctac												
caggcgaccc actgcccttc cctgcccagg aaatgggggg tttcagcaaa tcagtgtcat												
ggaataaaat caagtgtgaa aaaaaaaaa aaaaaa												

<210> 9

<211> 870

<212> PRT

<213> Mus musculus

<400> 9

Met Asn His Pro Asp Tyr Lys Leu Asn Leu Arg Ser Pro Gly Thr Pro $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Arg Gly Val Ser Ser Val Val Gly Pro Ser Ala Val Gly Ala Ser Pro 20 25 30

Gly Asp Lys Lys Ser Lys Asn Lys Ser Met Arg Gly Lys Lys Lys Ser

generally generally many consumptions of the construction of the c

Ile	Phe 50	Glu	Thr	Tyr	Met	Ser 55	Lys	Glu	Asp	Val	Ser 60	Glu	Gly	Leu	Lys
Arg 65	Gly	Thr	Leu	Ile	Gln 70	Gly	Val	Leu	Arg	Ile 75	Asn	Pro	Lys	Lys	Phe 80
His	Glu	Ala	Phe	Ile 85	Pro	Ser	Pro	Asp	Gly 90	Asp	Arg	Asp	Ile	Phe 95	Ile
Asp	Gly	Val	Val 100	Ala	Arg	Asn	Arg	Ala 105	Leu	Asn	Gly	Asp	Leu 110	Val	Val
Val	Lys	Leu 115	Leu	Pro	Glu	Asp	Gln 120	Trp	Lys	Ala	Val	Lys 125	Pro	Glu	Ser
Asn	Asp 130	Lys	Glu	Ile	Glu	Ala 135	Thr	Tyr	Glu	Ala	Asp 140	Ile	Pro	Glu	Glu
Gly 145	Cys	Gly	His	His	Pro 150	Leu	Gln	Gln	Ser	Arg 155	Lys	Gly	Trp	Ser	Gly 160
Pro	Asp	Val	Ile	Ile 165	Glu	Ala	Gln	Phe	Asp 170	Asp	Ser	Asp	Ser	Glu 175	Asp
Arg	His	Gly	Asn 180	Thr	Ser	Gly	Leu	Val 185	Asp	Gly	Val	Lys	Lys 190	Leu	Ser
Ile	Ser	Thr 195	Pro	Asp	Arg	Gly	Lys 200	Glu	Asp	Ser	Ser	Thr 205	Pro	Val	Met
Lys	Asp 210	Glu	Asn	Thr	Pro	Ile 215	Pro	Gln	Asp	Thr	Arg 220	Gly	Leu	Ser	Glu
Lys 225	Ser	Leu	Gln	Lys	Ser 230	Ala	Lys	Val	Val	Tyr 235	Ile	Leu	Glu	Lys	Lys 240
His	Ser	Arg	Ala	Ala 245	Thr	Gly	Ile	Leu	Lys 250	Leu	Leu	Ala	Asp	Lys 255	Asn
Ser	Asp	Leu	Phe 260	Lys	Lys	Tyr	Ala	Leu 265	Phe	Ser	Pro	Ser	Asp 270	His	Arg
Val	Pro	Arg 275	Ile	Tyr	Val	Pro	Leu 280	Lys	Asp	Cys	Pro	Gln 285	Asp	Phe	Met
Thr	Arg 290	Pro	Lys	Asp	Phe	Ala 295	Asn	Thr	Leu	Phe	Ile 300	Cys	Arg	Ile	Ile
Asp 305	Trp	Lys	Glu	Asp	Cys 310	Asn	Phe	Ala	Leu	Gly 315	Gln	Leu	Ala	Lys	Ser 320
Leu	Gly	Gln	Ala	Gly 325	Glu	Ile	Glu	Pro	Glu 330	Thr	Glu	Gly	Ile	Leu 335	Thr
Glu	Tyr	Gly	Val 340	Asp	Phe	Ser	Asp	Phe 345	Ser	Ser	Glu	Val	Leu 350	Glu	Cys
Leu	Pro	Gln 355	Ser	Leu	Pro	Trp	Thr 360	Ile	Pro	Pro	Asp	Glu 365	Val	Gly	Lys
7	7	7	T 011	7 ~~~	T 170	7.00	C	Tle	Dhe	Th~	Tla	Nan	Dro	20~	Thr

Ala 385	Arg	Asp	Leu	Asp	Asp 390	Ala	Leu	Ala	Cys	Arg 395	Arg	Leu	Thr	Asp	Gly 400
Thr	Phe	Glu	Val	Gly 405	Val	His	Ile	Ala	Asp 410	Val	Ser	Tyr	Phe	Val 415	Pro
Glu	Gly	Ser	Ser 420	Leu	Asp	Lys	Val	Ala 425	Ala	Glu	Arg	Ala	Thr 430	Ser	Val
Tyr	Leu	Val 435	Gln	Lys	Val	Val	Pro 440	Met	Leu	Pro	Arg	Leu 445	Leu	Cys	Glu
Glu	Leu 450	Cys	Ser	Leu	Asn	Pro 455	Met	Thr	Asp	Lys	Leu 460	Thr	Phe	Ser	Val
Ile 465	Trp	Lys	Leu	Thr	Pro 470	Glu	Gly	Lys	Ile	Leu 475	Glu	Glu	Trp	Phe	Gly 480
Arg	Thr	Ile	Ile	Arg 485	Ser	Cys	Thr	Lys	Leu 490	Ser	Tyr	Asp	His	Ala 495	Gln
Ser	Met	Ile	Glu 500	Asn	Pro	Thr	Glu	Lys 505	Ile	Pro	Glu	Glu	Glu 510	Leu	Pro
		515			His		520					525			
Asn	Leu 530	His	Ser	Ile	Ala	Lys 535	Gln	Leu	Arg	Arg	Gln 540	Arg	Phe	Val	Asp
Gly 545	Ala	Leu	Arg	Leu	Asp 550	Gln	Leu	Lys	Leu	Ala 555	Phe	Thr	Leu	Asp	His 560
Glu	Thr	Gly	Leu	Pro 565	Gln	Gly	Cys	His	Ile 570		Glu	Tyr	Arg	Asp 575	Ser
Asn	Lys	Leu	Val 580		Glu	Phe	Met	Leu 585	Leu	Ala	Asn	Met	Ala 590	Val	Ala
His	Lys	11e 595		Arg	Thr	Phe	Pro 600		Gln	Ala	Leu	Leu 605	Arg	Arg	His
Pro	Pro 610		Gln	Thr	Lys	Met 615		Ser	Asp	Leu	Val 620	Glu	Phe	Cys	Asp
Gln 625		: Gly	r Leu	Pro	630		Val	Ser	Ser	Ala 635	Gly	Ala	Leu	Asn	640
Ser	Leu	Thr	. Lys	645		Gly	Asp	Asp	Lys 650		Ser	Leu	Ala	655	Lys
			660)				665					670)	Tyr
		675	5				680	١				685	i		: Ala
Leu	Asr 690		l Pro	Let	і Туг	695		Phe	. Thr	Ser	700		e Arg	y Arg	y Phe
Ala	a Asp	va.	l Ile	va:	l His	arç	j Lev	ı Lev	ı Ala	a Ala	a Ala	Lev	Gl _y	/ Туз	Ser

720 715 705 710 Glu Gln Pro Asp Val Glu Pro Asp Thr Leu Gln Lys Gln Ala Asp His 730 725 Cys Asn Asp Arg Arg Met Ala Ser Lys Arg Val Gln Glu Leu Ser Ile 740 Gly Leu Phe Phe Ala Val Leu Val Lys Glu Ser Gly Pro Leu Glu Ser 760 Glu Ala Met Val Met Gly Val Leu Asn Gln Ala Phe Asp Val Leu Val 775 Leu Arg Phe Gly Val Gln Lys Arg Ile Tyr Cys Asn Ala Leu Ala Leu 795 Arg Ser Tyr Ser Phe Gln Lys Val Gly Lys Lys Pro Glu Leu Thr Leu 815 810 805 Val Trp Glu Pro Asp Asp Leu Glu Glu Glu Pro Thr Gln Gln Val Ile 825 Thr Ile Phe Ser Leu Val Asp Val Val Leu Gln Ala Glu Ala Thr Ala 845 840 Leu Lys Tyr Ser Ala Ile Leu Lys Arg Pro Gly Leu Glu Lys Ala Ser 855 850 Asp Glu Glu Pro Glu Asp 865 <210> 10 <211> 49999 <212> DNA <213> Mus musculus <400> 10

gatcctgact tcactatcca tagatagtta ggtttctagt actaggcatg ctttctctc 60 agttgatggc cttggtgctc agttagagag ctcttgttta ccatcaagct atacatgcca 120 ttactgcacc tttagtgtta atcttgccat gatgttcatt gttgttgttt atacgcatca 180 taactccctc tcctgcaggc tcactgacag taagatagaa attcctctgc tgctctgtgc 240 agtaggcagc ctacacatct acatgctgta tacccatata gctaagtagg acttttgttt 300 gcttctcttc cttggaaact tgcataatgc cctctggtat aatgaaagct agttccagag 360 aggaggtttt ccagtcagat ccagctcagg tcctcttagt cctatctgaa gtatatagtg 420 tcttcagctt gctgtagtgt atgtatagaa gccatagcaa aattttcacg ggtagatcct 480 ccccttccac ctttttgaag cagggtctct ctttttgttt ctgtcatact gtgcacccca 540 ggccagctga cccatgagct tctgggcagt tcttttatcg catattccat aggagtgctg 600 gagttataga tgtgtttacc acattcaacc ttttgtgtgt gttctgagtg aggcagttgg 660 ctgtcccagg gacacaaact gtgatctgga atgtttctga tatggtataa tagaattata 720 ttatgcttag ccagattaac tatttggccc cattttttta ataactattc ctgagtcctg 780 tecetgtete agataceaeg taacattett tggcatacte tgtttacetg aatgagagag 840 gaggccacag atcaaacctc cctgctgcct gatggtacct gttctctctt ggggcaagga 960 gaagtttgag tcaagtcaca aagaggaaga gaatggtgat cacatctctg actctcctag 1020 cctcacattt ctctctctt atgtgcaaaa caactgttct ttaacattct gtgacagtgg 1080 attatttgtg ataattctgt tttccatctt tcctaggaaa gactgtatct tcaccattga 1140 tecateaact getegegace ttgatgatge cetegeetge aggeggetea etgatggtag 1200 gatagacatt cctctgctac tctgtgccgt agcaacctgc acacccgtgt gctgtacacc 1260 catgtcaggc ttccttgtgc tgtttcagca gcctaatggg caaggacggg gttgcttcag 1320 tcccgaaatt ggctatacaa gctaagtaga gtggggtggc agcagacact acctcctaag 1380 acatggttgt ctaggcctga cttgcagaag cccctctata ccatgtagct ctttgtctat 1440 taaaaagact gtgagggctg gagaggtggc tcagtggtta agagcactga ctgctcttcc 1500 agaggteetg agtteaacte ecageageea catggtgget cacaaccate tgtaatggga 1560 tccaatgcct tcttctactg tgtctgaaga cagcgacagt gtactcacat acataaaata 1620 attcttaaaa aaaaaagatt gtgaatggcc aactgacttt tcaaaaagtc agggtctcag 1680 tcatggatga ttgtagtaga cagaatagta gcagctgatt gtcgaaagac ttggagacag 1740 tgtgaggaaa aaacccctaa cagttctctc catccctgca gatacatttt ctaggtatgt 1800 ctgacccttt tcttaggggt gccttggtga ctactatgac atttattatt cttgaagatt 1860 actttagact aacatggcct ttgatggtgt accagtgagg tatgcataac tttttatgtt 1920 tgtctgccac agagcattga tggcctacct tcaaagtatt cacccctcat cttcttctgg 1980 tgcaaacctc agtgtttcct tctctgttgc aataaatagt gatgattatc agacagaagc 2040 taagagacag aacatgctgc ctaaaactgc ttagcttctt ttagtaggag ctctctccac 2100 ccaccccaca aataatcctg tgcataagac tcatgcgtgc taggcaacac tctgttactg 2160 agctgtatct tcagcacagt actctcagtt gtgtttctat aatctaaaat taggacagcc 2220 tatttacaag agcaaacttt ggcccaacgc cttacattct gattacgctc tgctgtgcac 2280 ctcttgcttg aacaagcctc ctctctctgc agatcctact ctctaaaaca ccaatatgaa 2340 cagtacccaa ggcagagacc tggtgatgct gggccttcat ctcctggggt tattgctcct 2400 ctctgttagt ggttgaaaac agctgttccg tttattctct ctagttttaa gttgtttata 2460 gcagaagtet aatatetgtt tetetatete tgatageete aaactettga aettgeaggg 2520 agagcaggga gctagcatat gtccttcctc actcactctg cagggccact tcacacttct 2580 gctatgcaag tgtgagggca aaggtttcat ggagaaaatg ctgcaagaaa agcagatgag 2640 cagcaagtaa tgttctttat ttgtcagacc atacaaaatc acatagacat tgttctgcag 2700 gaattcagcc acagcaggga gaaataagtt atcaaaagac taaaggaaaa ggagaagagg 2760 taggccagga aaatgccaga aaaagtcaca cgtataggca tacagacctg gactggagat 2820 tataagcaag atccgtgagg agtgaggtaa cagagacgag aaagagaaga atctgtggaa 2880 acaggtggca gaagggacaa agaagagaca gaggtgggtc atcctggatg gtggggaaat 2940 atccacaggt agaaattgga aagtcaggag gacatgctgc tggttttgat caggctacca 3000 catggagttg cctgtctcat aataagcatt tatatgaatt actgctaacc tatttttaaa 3060 ggacaagaga ataaataaag agtagatggt gtcataaagc tatagcagga gagccctgag 3120 gggagacaag cagcgtacct agtacagaga ttgaacctaa cctcctagga agatgggatc 3180 ataggccatt ttcctctctg tccaaatttt ataatgtggt aatagtagct ttataatgaa 3240 aaagctttgt agtaaaaaat tatgaggtga caggaatccc aagctgccca gaagtcaccc 3300 atcgcaccaa gtgatcagag ccttccttct atgtgcttgg tatttcttgc attccagaga 3360 gacagttgac atctgtgcat ctggcggggc aacagcataa ggaagaaacc agcgaagtct 3420 tgggaaaagc cgaggtagtc agtcaagcat ttttatggtg gcacttccac agttggccat 3480 tgggacagct ggatctgcca ggatcattta tccagggaga tgaaaagcaa ataggcaagt 3540 ccagtttgga ttgggatggc cttggctaag ttcagattcc attagttacc agttcatgtc 3600 agttcctact tagaggaaaa tatttactgt tttaaaaaagc aaataatgtt ttctggccat 3660 atttatataa tctgtgttta tttaaataaa atactgtata aaaggtatgt ttttctttgg 3720 tctcacagaa atcatctgaa tggctattgt gtgaaaaatc aactctacag acagatagag 3780 ctttccaatg ctcacacttc cttccataga gttccagggt acacccaggt ctttcctatc 3840 aggtgcaaga tacagacaat caattgtgta acatgttaaa tttaaccgaa aggaggagga 3900 ggtgtatccc cacctccctt ccaaagcaga gcttctacca tgcatctgat ctgggattcg 3960 ctcctttagc cccaaacaca cctaaggaga aggagcactc cccagcaatg tggattcttc 4020 actttgcata agaaaatatt taataaaaag tggtattgta atgatatccc agaatctaaa 4080 gacagtaaat cccagttcag tattttatga ttgtaacaga ttgcttgcag cacacctcac 4140 agttgacctc acattagtct gggaatacca cagttgtaag ctcaccctct ggtttcttaa 4200 taactcttgc agcattcact ttattgaata tccagattgc atttgaactt gttactccaa 4260 aggcagtctg ttctgccata agattgtgtg actcttagga aatcctcccc tgaaagaatc 4320 agaaatactg ttgttatctt tctgcaatgt ttcatttgtt agtcctgtta atgctcctca 4380 gtgccctgaa gcacaaatac agtgtctcgt gtgaaaatct ttccaaacaa gatctatcat 4440 ttctcttctg aatcacatct cagctaagga acctaaatat cctttcatgt tttgtggctg 4500 atttcttagt gtgaatccac tcaccacgtc atagagtctt tctgcctctg agaggtctac 4560 ggtgtatgac tccctgcctg gcaagctctc ctagaaagtt catctttact gaaagaattg 4620 ggatctggat aatatgtacc cattttgttc agttattgct tttccatggg tgtcaaagac 4680 catactgtca gatagatggg ttctttagca aactgtcagg cagagtcttt agctttagtt 4740 gattctggaa ccccacaatt ctgcatcttg ttttgtaatt tgaattttct aaggtttgct 4800 ctgtcattga acatggctgg gctgtccttg ccaggcctta gaagtgaatg agcaggagat 4860 gggaacagct gctaatgaac ttgggctttt tttggagaga tgaaagagtt ctgaacaatt 4920 ttgtgaaaat gttaaaacca caaaggaaag atgaatgagt gaagaatgga tgaatgagaa 4980 aaattaatga acaaatctta atccacttat ttttgatact ttatggagat tagaatttag 5040 attttgtcca tgactaagca gggatcttaa tgggatgtcc atctgggtac cttatagtca 5100 catccttatt gccattctga tgggagtaag gtggaatctc acagctggta tactttacat 5160 ttccctgata actcaggatg ttgaacattt ctttaggtac ttcttggcca tttgaaattc 5220 ctccatttta tattatttgt gactattgag aagggtgttg tttccctaat ttctttctca 5280 gcctgtttat cctttgtgta gagaaaggtc attgacttgt ttgagttaat tttatatcca 5340 gctacttcac tgaagctgtt tatcaggctt aggagttctc tggtggaatt tttagggtca 5400 cttatatata tactatcata tcatctgcaa aaagtgatat tttgacttct tcctttccaa 5460 tttgtatccc cttgatctcc ttttgttgtc taattgctct ggctaggact tcaagtacaa 5520 tgttgaatag gtagggagat agtggacagc cttgtctagt ccctgatttt agtgggatta 5580 cttccagctt ctcaccattt actttgatat tggctactgg tttgctgtag attgctttta 5640 tcatgtttag gtatggctct tgaattcctg atctttccaa gacttttatc atgaatgggt 5700 gttggatttg gtcaaatgct ttctcagcat ctaacgagat gatcatgtgg tttttgtctt 5760 tgagtttgtt tatatactgg attacattga tggatttccg tatattgaac catccctgca 5820 tccctgggat gaaacctact tggtcaggat ggatgattga tttgatgtgt tcttggattc 5880 agttagcgag aactttattg aggatttttg catcgatatt cataagggaa attggtctga 5940 agttctctat ctttgttggg tctttttgtg gtttaggtat cagagtaatt gtggcttcat 6000 agaatgagtt gggtagagta ccttctgttt ctattttgtg gaataatata aaataccttg 6060 gcgtgactct aactaaggaa gtgaaagatc tgtatgataa gaacttcaag tctctgaaga 6120 aagaaattaa agaagatctc agaagataga aagatctccc atgctcatgg attggcagga 6180 tcaatatagt aaaaatggct atcttgccaa aagcaatcta cagatttaat gcaatcccca 6240 tcaaaattcc aactcaattc ttcaacgaat tagaaagggc aatcggcaga ttcatctgga 6300 ataacaaaaa acctaggata gcaaaaactc ttctcaagga taaaagaacc tctggtggaa 6360 tcaccatgcc tgacctaaag ctgtactaca gagcaattgt aataaaaact gcaatggtac 6420 tggtatagcg aaagacaagt agaccaatgg aacagaattg aagacccaga gatgaaccta 6480 cacacctatg gtcacttgat ctttgacaag ggagctaaaa ccatccagtg gaaaaaagac 6540 agcattttca acaaatggtg ctggcacaac tggctgttat catgtagaag aattcaaatt 6600 gatccattcc tatctccttg tactaaggtc aaatctaagt ggattaagga acaccacata 6660 aaaccagaga cactgaaact tatagaggag aaagtaggga aaagccttga aggtatgggt 6720 acaggggaaa aattcctgaa tagaacagca gtggtgtgtg ctgtaagatc gagaatcaaa 6780 aaatgggacc tcataaagtt gcaaagcttc tgcaaggcaa aagacaccgt gagtaagaca 6840 aaaagaccac caacagattg ggaaaggatc tttacctatc ctaaatcagg taggggacta 6900 atatccaata tatataaaga actcaagaag gtagactcca gaaaatcaaa taaccacatt 6960 aaaaaatggg gctcagagct gaacaaagat atctcacctg aggaataccg aatggcagag 7020 aagcacctga aaaaatgttc aacatcctta atcatcaggg aaatgcaaat caaaacaacc 7080 ctgagattcc acctcacacc agtcagaatg gctaagatca aaaattcagg tgacagcaga 7140 tgttggcgag gatgtggaga aagaggaaca ctcctccatt gttggtggga ttgcaagctt 7200 gtacaaccac tctggaaatc agtctggcag ttcctcagaa aattggacat agtgctaccg 7260 gaggatacca caatactttt cctgggcata tatccagaag atgtcccaac cggtaagaag 7320 aacagatgtt ccactatgtt catagcagcc ttatttttat tagccagaag ttggaaagaa 7380 cccaatgccc ctcaacagag gaatggatac agaaaatgtg gtacatttac acaatggggt 7440 actactcagc tattaaaaag aatgaattta tgaaattcct aggcaaatgg atggacctgg 7500 agggcatcat cctgagtgag gtaacccaat cacaaagtaa ctcacacaat atgtactcac 7560 tgataagtgg atattagccc agaaacttag tatacccaag atataagata caatttgcta 7620 aatgcatgaa actcaagaag aacgaagacc aaagtgtgga cactgcccct tcttagaatt 7680 gggaacaaaa cacccataga aggagttaca gagagaaagt ttggagctgg gacgaaagga 7740 tggaccatct agagactgtc atatctgggg atccatccca taatcagctt ccaaacgctg 7800 acaccattgc atacactagc aagattttgc tgaaaggacc cagatatagc tgtctcttgt 7860 gagactatgc cggggcctag caaacacaga agtggatgct cacagtcagc tatcagatag 7920 atcatagggc ccccaatgga ggagctagag aaagtaccca gggagctaaa gggatctgca 7980 accetatagg tggaacaaca ttatgaatta accagtacce eggagetett gaetetaget 8040 gcatatgtat caaaagatgg cctagttggc catcactgga aagagaggcc cattggactt 8100 gcaaactcta tttgccccag tacaggggaa cgccagggcc aaaaagtggg agtgggtggg 8160 taggggagtg gaggggaggg tatgggggac ttttgagata gcattggaaa tgtaaatgaa 8220 gaaaatacct aataaaaaat atatttaaaa aaaaagaaat tcctccattg agaagtctct 8280 gtttaagtat gtacctcatt tttaattggg ttttctggat tgttggtgtc tgtcttgagt 8340 totttatata ttttggatat tagcoctotg toaaatgtag agttagtgaa gatotttooc 8400 caatctgtta ggctactgtt ttatcctaat gatgatgtcc tttgacttac agaagctttt 8460 cagtttcatg tggtctcatt tattaattct tgaccttagt gcctgagcca tttgtgttct 8520 gttcaggaat ttgtctcctg tacccatgaa ttcaaggcta ttccctgctt tctcttctat 8580 taaatttagt gtatctgact tcaagttgag gtctttgatc catctggact tcagttttgt 8640 gcaggttgat aaatatgtat ctatttgcag tcttctacat gcagacatcc agttagacca 8700 gcagcatctg ttgaagatgc tctccctttt ccattgtatg gttttggctt ctttgtcaaa 8760 cacctgtctg tttctatacc aagatcatgc aggttcttat tactattgct ctgtagtata 8880 gcttgaagtc agggatgtta tatctccaga agttctttta ttgttcagga tcgttttaac 8940 tattctgggt tttttgtttt tccttcgaag ttgagaattg ttctttcaag atctgtgaag 9000 aattgtgggg aggtaggagt tttgttgggg gtgtgacacc catagggggg atttctcctc 9060 tttgggatgt aaagtgaata aataaacaaa caaaccctgg aatcatattg gccacctttt 9180 cttctcagga ctgttgctgg gccttttcag tagccatctc tctctgacct ctgcccatta 9240 tetttetete getgtaetta caaccagage atgecaettt tettagaaaa tetgtttgtg.9300 cctatggacc aagcatgcca cttttcttag aaaatctgct tgtgcctatg gaccaagtcc 9360 tectaceaaa geeetgeaag getagteete tgettaeece etecaacaeg caetggtaca 9420 cacacttaca cacattcaca catgcacaca tacatacgca catacccaca tacacaagca 9480 agctaaaatt ctgcagatat ttttttctcc tggcagaatg aattatttct acttgatcac 9540 attagectgt ttctaacaac aataaataca attacttctg atttactccc ttttttttct 9600 cgtttcccag ggcagtattc cttgggcatg tgtacatctc aagtattatg aactttaaaa 9660 ctgttcagtg ttgctgacct cactaggcag tcttatagta ttgctcttct ttttgctgct 9720 gtttttgttt ttttgtttt ttttttactt gacttcttca tttttctgtc tttatctata 9780 atttcatggt tgcttgtagg cttatatcct gatctataag gctcctttac ttttatccta 9840 aactaaatgt ctctttggaa tttatatagt cttcccttgt ttcatttcca ttttttaact 9900 catgtgtcat gtcttggtga taccaacagg cttactgaat tctgtcttat agttgttctg 9960 tccttttcta gcatagtgga ttttgcacac cttataccca gggtcttctt acatgagtca 10020 ctgaatgccc taaatgcttt tctctcttca tgtctatagc cttcccagag actcatagca 10080 tgtcttttat tttgtcatct gttcctgcct gtattcttgc catttccaac taaggaagag 10140 ctaacttaag cctactatgg gcagagaact taccttcctc ctcacgaatg tcttgaagct 10200 tgattatata tcagggtgtt tttgtttttt ggttttttt ttttttgata aatatcctat 10260 gtatacctga aaaacatgtg ttctcttccc tgttgagaag tattgaaaaa tgacagtaag 10320 acagtattgc taaatgttct tggtctcccc tgctttgtgt tcctcatgcc tgcattagct 10380 tgtcttcact gtggcgagga agtaccagag agaaacattt aaaggaggaa ggttgcttgc 10440 teccaetete agaggettea gtecaaggga aacagtgaga gtgtacagaa accetteace 10500 tettagetat caggaagetg actettette catggetett ttateteete tatetattta 10560 cagttgctat agatactaca cctaactgtg tgtgtttgaa ttctatgtct ttgtccattc 10620 ttccttcacc ctttttttaa aaaataggtt ggattttatg aggaaattgt gaacagttga 10680 gggttcaaga gtcattccca tgtagcaaca tttctttaca ttttttttct aatttcacaa 10740 tataaattcc cttctttgtt cttctgaata aaaactatga ttatttcttt taattttaat 10800 tttatttact tattttacgt qtqqqtgttt tqcctgcatq tqtgtctgtg cgccaaatca 10860 gtgtcttgtt tctgtggaga cagaaaaggg catcagatcc cccagaactg gagttacaga 10920 ageteattta catttecaat getataecaa aagteececa tacceaceca cececactee 11040 cctacccacc cactccccct ttttggccct ggcgttcccc tgtactgggg catataaagt 11100 ttgcaagtcc aatgggcctc tctttccagt gatggccaac taggccatct tttgatacat 11160 atgcagctag agacaagagc tccggggggt actggttagt tcatattgtt gttccaccta 11220 tagggttgca gttcccttta gttccttggg tgctttctct agttcctcca ttgggggtcc 11280 tgtggtccat tcaatagctg actgtgagca tccacttttg tgtttgctag gccccggcat 11340 agteteacaa gagacageta tatetgggte ettteageaa aatettgeta gtgtatgeaa 11400 tggtgtcagc gtttggaagc tgattatggg acggatctct ggatatggca atcactagat 11460 ggtccatcat ttcgtcacac ttctaaattt tgtctctgta actcctccca tgggtgtttt 11520 gtttcctatt ctaaggaggg gcaaagtgtc catactttgg tcttcgttct tcttgagttt 11580 aatgtgttta gcaaattgta tottatatot tgggtatoot aagtttotgg gotaatatoo 11640 acttatcagt gagtacatgt tgtgagagtt cctttgtgat tgggttacct cactcaggat 11700 gatgccctcc aggtccatcc atttgcctag gaatttcata aattcattct ttttaatagc 11760 tgagtagtac cccattgtgt aaatgtacca cattttctgt atccattcct ctgttgaggg 11820 gcatctgggt tctttccagc ttctggctat tataaataag gctgctatga acatagtgga 11880 gcatctgtcc ttcttaccag ttgggacatc ttctggatat atgcccagaa gaggtattgc 11940 tggatcttcc ggtagtacta tgtccaattt tctgaggaac cgccagactc atttccagag 12000 tggttgtaca agcctgcaat cccaccaaca atggaggagc gttcctcttt ctccacatcc 12060 tegecageat etgetgteae etaaattttt gatettagee attetgaetg gtgtgaggtg 12120 gaatctcagg gttgttttga tttgcatttc cctgatgatt aaggatgttg aacatttttt 12180 caggtgcttc tetgccattc ggtattcctt gggtgagaaa tetttgttca gttetgagec 12240 ccatttttta gtaaatctca aagcacacat tgcacctcac acaataataa tgggagactt 12300 caacacacca ctttcaccaa tggacagatc atggaaacag aaactaaaca gggacacagt 12360 gaaactaaca gaaattatga aacaaatgga tctgacagat atctacagaa cattttatcc 12420 taaaacaaaa ggatatacct ttttctcagc acctcatggt accttctcca aaattgacca 12480 cataataggt cacaaaacag gcctcaacag atacaaaaat attgaaattg tcccatgcat 12540 cctatcagat caccatgcac taaggctgat cttcaataac aaaataaata atagaaagcc 12600 aacattcacg tggaaactga acaacactct tctcaatgat accttggtca aggaaggaat 12660 aaagaaagaa attaaggact tcttagagtt caatgaaaat aaagccactt catacccaaa 12720 cttatgggac acaatgaaag catttctaag aggaaaactc atagctctga gtgcctccaa 12780

aaagaaacta gagagagcat acattagcag cttgacaaca cacctaaaag ctctagaaca 12840 aaaggaagca aattcaccca agaggagtag gaaataatca aactcggggc gaaatcaacc 12900 aagtggaaac aagaagaact attcagagaa tcaaccaatc gaggagctgg ttctttgaga 12960 aaatcaacaa gatagacaaa cccttagcca gactcactag agggcacagg gaaagcattc 13020 taattaacaa aatcagaaat gaaaagggag acataacaac agatcctgaa gaaatccaaa 13080 acaccatcag atccttctac aaaaggctat actcaacaaa actggagaac ctggatgaaa 13140 tggagaagtt tctttacatt ttaaagtgag gtagtggtag ttgttttggt ttatttttt 13200 ttttttttt tttttatctc taatgttgtt gcccaattag aggaggatat tgaaggaaat 13260 tcgggtgctg aggtggatct ttgggcaagt gtaaaagcct tctcatttga tagtgtaatt 13320 gtttaaagag ttttgtagat aaaaggctct ccttttgatt gaccattttc acaatatgaa 13380 attcaactaa agtctttctg tcaagtcatc aacatcaaga aaaacacaat ttccttagta 13440 tacaggtgta tcaaaagttt gtctacttgt acttcaaata catttcaaga tgtaaatttg 13500 agacttaaat ttttaaaaag agaaaaagat atcttagaga ctatagagtt ggctcagagt 13560 aaagagcatg ttctggtttt tagaggaccc aggttcaatt cccagcagct ccagaggggc 13620 tgcttgccac aggctcctgt acacaccatt tatacattcc catagtcaga cacgtgcatg 13680 tacacataat ttaaaacata atgaatcttt tctaaaagat agatcttatt ttattttta 13740 aaatggttac cataaaagct ttataaatca agatagatat acaagaaaaa tatatataaa 13800 cttagaaata tattctaaga taaaagtaca tgtaatacac acacatttag tttgcttact 13860 ctccagggat aatgatgaat actcaatctt acattgaaac agcctctgat agctcaatct 13920 tggctagatc aaataggttt taatgcagta agctttactg catataaaga ctcactaact 13980 tattatcaca aatggccaat tcaagaaaat ataataatgc taaacacatt caccaatatt 14040 ttgttttaaa atatataaaa cttaacagaa atacaaagat gagttgattt ttattgctac 14100 gggttaattt tatatacctt tctcagaaaa tgatactata aaacagacca gaagttcagt 14160 aaaattacag aaaatttaag ccacacagct attatctgtt ctaataagct tatctaatat 14220 acagcattta cagctagaga atacaaagca tgcttcttaa atataaggta cagttattat 14280 tttctatgca aagtacagtg atttttaaat attttaaaaa taattatgaa aatggtattc 14340 tggaaaataa aatacaaatg aggaatttaa ccattagctt tgcccttttc agtttattaa 14400 gactttgcac tcagtccaag acaaaaagtc ctacaagtgt tagtaaactg agacctggaa 14460 cacactaaag taaatctagc acatggccca ggctcctttg ctagaaattt ggctactgtc 14520 agettaagtg aatageactg tgtcacagac cataaggeac actagteact agetgtgace 14580 ccagccacac agattgtgtt gtaagaagct gacatttctg ttgtctaatt gctgcagtga 14640 agactttggg tagtgcaccg agtaagagga gagcacaaac atccttgctt tacttttgaa 14700 atcataggaa atgctctcag tttgtcctca ttttagaaga atggtggcca taaatttgtt 14760 gtacagagcc attattactt tcaggtgtga tgtacctgtt cctaatgcct gcaggacttt 14820 tatgcttata aactgccttt tctggaatca agatggttat aatgtttcta accttgtatg 14880 tttataacat atattatatt attgatttac atatgtcatg gtgaccctgc tcttcagggt 14940 gaageteact tgateacaat gtatgatett ettaatgtgt eecagaatte agettaaaag 15000 tatttgattg agaacttttg catctgtgtt aatcaaataa attgatctat agttaaaaaa 15060 aaaaaagaaa agaagaagaa gctgacattt ctgccagctt cagagcacct tgtgcccaac 15120 ccttagaagc aaaggctctg ctctgctgtc tgactgtgca catgctgtaa taaacgaatg 15180 cccatcttcc tacaggaaac agttgcttat ttaataaata cttagaacat cactaggagt 15240 ccatttcatg agtttatttt ctgaaaacct tggatgcgaa ctgactacac aagacgttcc 15300 tttaaatttg gtctccatat tcatttaaca gattgggatc ttgaaatctt ttgcaaaaga 15360 agaaatggaa atccctaatc ctggggcact gtaattataa aaatagaata tacaggcata 15420 tgaaaaaaat gctcacaggc agcacaaatg ataaaaagat aattttaaaa ataaaaacag 15480 ttagttgata ccctcctttg ttttgcaagc actgtaacaa ctaagataaa gatttaaacc 15540 tgaattcatt teeteetetg tgattagaaa ttttaaaaaat acataatttg eeetgetata 15600 ttttttctag tcattagttg agatataatt tcagaagatt aaaattgggc ttttacagcc 15660 cctatcaaag caatattatc ttgccagttc ctacctccct gtttagtaaa cagagggttg 15720 tgtcaactgg catagactta acttatttaa tgtacttatt atatgtccat gtggttaact 15780 gggttctccc tttcatccca aagctctgct gcagaaagct ggctgtagcc atgatgcaca 15840 cactttgggt ctttttgcca gtattggggc cacagaacaa agagagtcag aggcctgcac 15900 actgttcagc atgcatggca gctctgtgag aagctgctgg cacatgtatt actgtgcttc 15960 aacacacagg aaatacttat aaatactgat tgtttttaaa aaagaaaatg aaaccattca 16020 acttatttca aatatcataa atgttataca atcagatgct tagaccataa cttaattact 16080 aattgcaaaa agtagtttaa gaaaaattca ttagggttgg aggtaggggc agtgcaaggg 16140 gggattggga ggaggagaaa gctgtgattg agatttaaag tgaataaata gattaataga 16200 aaaaatatca ataacaacaa caaaaataga tttggaaatt ttatttacat ttcttattat 16260 acaattgcta agttaacaaa aattaaggtt tagccataac atgtctcctc ttcttccacc 16320 caaagagcaa ttagatggaa ggcacatcag gggcacttag tgtggtcgtc taatgtaccg 16380 tgatgagtgt gactatccca gctctccgtg actgtttact ccatcacagc tttttacaca 16440 gagtcccaaa tgtgcccttc tttaggcttt gggatttcta ctttgctact tttctgaaac 16500 tgtgcaagag ccacctaatt ctggaatgtg tcttgtgctg tcctggttcc ctacaagtga 16560 gcacagggtt gtttagaagc tgttactaca agggaccaca tcacaaaaaa gaagagaatt 16620 tctttaacag aagaaacctt gataccgaaa accgtctgga gaaaagtggg caggcagctg 16680 gtcctcatgt gcctgctccc tgtgaacaca ctcttctgct agctgacttc atctgttgac 16740 agtctggtcc cataaccttt gctcagtact tcaagcacaa ctggagacag ttaaagatgg 16800 caatggcttg ctgtcccctg catcaaatct aggtccactt ggacctctat ccgctctcac 16860 actgtgagca cccacaccct gatattttcc ccttaacagt ctaaacctaa atctaaaaag 16920 accttaggtg cttttgtgaa aagtctgtct caagacttga cccctcctgg gaagagtatc 16980 actagggagg ttcattcctt ttagagaaga atgttcctgt gcctgttgcc tgctttacaa 17040 acaacaataa atgaattgtt ttgttatcat actgcctcgg cagtgtcaaa aaagcaggtc 17100 atctcgttgc actatgtggg aaaacactgg gtatatagca tcctctgctc catcagcatc 17160 ttgaaagaaa ccacattccc ttgtgctcct accaccatga gcagtgtctt ttaccatgcc 17220 tggaagctat tcccagtgcc ctctcacaag ctccattgac acaggataaa aaggtgggcc 17280 cccaggctct tgtagcatag tttacagaat ggggaatcaa gctttccagt tagtcttaag 17340 tatctcagca ctaccttata ctgcctacaa gagggaggat cactggggtc aaatatatgt 17400 gtatctcagc ctctgcattg tcatattctt atctagcagt tcatccagta caaatttaaa 17460 agatactttt aaaagttgac ccatactaaa catgtacttt cctcttgtca ttattctcta 17520 aacaatgcaa ccaaataact atttacaaag catttatatc atattaggtt ttataattac 17580 ctagagatga ttttaaatga ggccatgaat agattgtgtg cagatacagc agtactgcat 17640 acaatatatg tgttcaaata ctggggtact ttataagtgg aacttgagca tccagacccc 17700 agggaattct gagagtgggc tgtattctca agccttcaaa gtcagtgtgg tagcctgacg 17760 gctgtcttag tagctgtcca ctcctcctgg cggtttcatc aggagttatc tttttttct 17820 tgacatttag ttattggcct tgtcatgatt ctcccatatg ggctatccag gcccttgaca 17880 tttatgtatc aggcagaatg cctgatttga accctctatg atctcttaac ctgcaggcta 17940 ctcttctccc tggcccatct acttccatga agtgaatctt aaaatgttat gattcaattg 18000 gatgcttgtc ttaaaaattg aatactgtgc taagaggcaa ctcacaccta attaggaaag 18060 ttttatctgt catctgttga aaatgtgccg tacatatctt taaaaaaatga gacttacacg 18120 tactatttaa tttcatcaga aactatgtat aaaatctgtt ctttgtgttg aaaagggaac 18180 cttattcact cttcaataga ttttggaaga gaaattttcc acttgaggga aattttccgc 18240 tcagatacac ttctggactt tgtctctgac atcttcatga tgctctgtgc tttgaatgct 18300 gtttgttcct cctgtgcctc ttccatggga agtcatttct aatccccatt ttgaaacact 18360 gatttcaccc ccccccctc cttgaagtct cttatgtcag agggcattct gacctcaggc 18420 agatcacagg caactcaagt actcaattgc agacaaactt tattttggta gcagggccct 18480 tgatgaatct gggaggagca atggaaagtt ctgtaggtat gtcagcccag aaggaaatgc 18540 atgtcttctc cattcatcta ggaccctggt gatggaacaa ctctaactgt ccttgatgga 18600 tgatcatttt tttttaaact taattgtacc ttgactcaaa atatccaaat aactgaatag 18660 ccacacaagg gccctggcat gagagtgggc ttctgggata tatgccaatt tgctcctgtt 18720 ctaaggagag gctataagtg gaaagattaa gtggagagac agccccaccc ctctaagtct 18780 tattcctatg ttccattcaa actgtgctag cctgatttct gtggggtcca ggctttggaa 18840 attctccttt tttcatggat gtctcagtgc accttgttaa accaagtttg gcccctggcc 18900 tgttcatctg tttccagctc tactgattgg ttccagtttc cttgctcatt aaagccaaga 18960 taatctggca cccagtagtc aggcatcctc aagcatctgg caccaaggtg aacctggaag 19020 ccagtgggga ggcccagtga cccaacactc ccattgcacg gtaagagaag ggcgcagtgc 19080 gccaatgcga gcatgggata ggagcagaag aatgggagaa gaatgggctt cccaccttgt 19140 ctttgcctct cctgcctctg gaagtccaag cgtgtctgtg attccctgaa attctttcct 19200 cagcaataaa atagtggttt aaactcgaca tcattgcaag tttctaccag ttgcaaattg 19260 ctaagtgtat taaaacctaa aagaaataag ccccctttat acctgttttt gcaaaaattt 19320 gatctaactt taactatact agcagtagca tattctactg atgctttcta caaactacaa 19380 gatgagcatt gtgcaagcct gcaattccag tgcacaggag gtggaggaaa ggaaagacca 19440 aatatgggtg atgtggtaaa ggtactgtca tgcctgatga cctgagttta atccttagaa 19560 cccatgcatg ttggaaggaa ttcacttcct gcaaatttcc ctttgaccta tataggtgtg 19620 ccatagtaca cctgagtaca agagttcaca cccacaacaa atacatcaag aaagaaacat 19680 ttttaaagaa aatagcagca gctactaaaa caaaatgaaa aagattaaga gttcctattc 19740 caaagcaaaa ggttagctct ctgagtccca tattctctaa tctctgaaac aagaatgata 19800 atatctaact cagaattgct tgggaaatta aatttaaaaa tccctgggca cctagaactg 19860 tgcaatacaa atagtgagtg tttgatgaat ataattaatg ttaatacaaa agtggaaaga 19920 ttaaacctaa caaagagttg tactacagaa acaaacagca gctgctgttc agaagctggg 19980 aggtaaacag aagagaagat ccagaatcac ctcatgtgtg catgtgtatg tgagcatgtg 20040 tatgtgtgtg tggttatatg tgagcatgtg tatgtgtgtg tgtgtatatg tgagcatgtg 20100 tatgtgtgtg tgcttatatg tgagcatgtg tatgtgtgtg tgcttatatg tgagcatgta 20160 tatgtgtgtg tgcttatatg tgagcatgtg catgtgtata tgtgagcatg tgtatgtgag 20220 catgtgtata tgtgagcatg tgtatgtgtg tgtgcttata tgtgagcatg tgtatgtgtg 20280 catgtgtatg tgagtatgtg tatgtgtgtg tgcttatatg tgagcatgtg tatgtgtgtg 20340

tgtgtatatg tgagcatgtg tatgtgtgtg tgcttatatg tgagcatgtg tatgtgtgtg 20400 catgtgtatg tgtgcatgcc tatatgtgag catgtgtatg tgtgtgtgct tatatgtaag 20460 catgtgtatg tgtgcatgtg tatatgtgag catgtgtatg tgtgtgtgta ttgtgcatgt 20520 gtatgtgagc atgtgtatgt gtgtgtgctt atatgtgagc atgtgtatgt gagcatgtgt 20580 atatgtgagc atgtgtgtgt gtgtgtgtat tgtgcatgtg tatgtatgca tgtgtaggca 20640 cctagttttc aactcactgc ttcttcggtg tagtgaaaaa taagtagtgc tagatcaagt 20700 ggggagcttg tatagaagaa aagtggaatt tgatccatgc ttccactcta cataaaaatg 20760 agctccatgt gactcatata tctacatgag aaaagcaaat tacaccgcat caagaagata 20820 gcagaataat actctcacag ccttggggga gcccaagatt tcttaaacca ggagtgaaaa 20880 ccatggtcct taatagatta ggtctgccgg gggtggggg gggggtggca cacgccttta 20940 atctcagcac ttgggaggca gaggcaggca gatttctgag ttcgaggcca gcctggtcta 21000 caaagtgagt tccaggacag ccagggctat acagagaacc cctgtctcaa aaaacaaaaa 21060 taaacaaaac aacaacaaca ataaaaatga ttaggtctgg tgtggtagtg catgccttta 21120 atcctagccc tgggagacca aggcaaccag gtccccagga aacccccatc tcaaaaaaaa 21180 gaaaaaaaa agatttataa actagactgc ctattgctgt gataaaatac catagcaaag 21240 gtaactttta gaagaaaggg tttgtcatgc acacatgtgt gcacatacat acacacac 21300 acacacacat acacacagag agaggggga agagagagag agaatagttg ctatgctatt 21360 cctgtagcag atttatatcc tttgcattta taaattgagt ataatttttt gtctttgtct 21420 acttctgaaa agccagaaaa tggtttctcc ctcatgcaaa gaaatgaatg aatgagtaaa 21480 attgagtaat tagactgaaa agagagctat ttaacattac tagaaatagc ccctcgcccc 21540 aaagagtaat gagagccctt ccaagttttt atcactaaga tataaagtga tgaacttttg 21600 cctctcagaa tttgaagtga gaaacaaaaa ttttaatttc aagtgaaagg aagactttat 21660 taatcagtag ataattacag ttaacatata gtacctagac atttaaatat acatatattc 21720 tttgagatat ataaaattat gtgtctttta aattttgctt ttagaaacta ataattatat 21780 attcttaata gaaaaaaata gaaaaaaaaa tctacaaaag gctgagtgtg atggagcatg 21840 cctgtaatcc caggcctttg tgagtcttga ggtaggagga tcaggaattc cagagcagac 21900 ttcgctacat ggaaagttgg gtttgaggtc agcttgagac cttgtataag aaacaacagc 21960 aaggatgagt cagtctataa gtgggcatga taatgtgcta aaattctgta tcaaacctac 22080 acgtgggcat gtcgagctct ggagaagagc tatcagcagg aatcatacag tgctcactgt 22140 cccacaggag tcaagcaaga ctagggctct gggacagcca taccaaggca cctgagaagc 22200 atttgaaagt gctgggagca agtatagtgg gcttacacaa actagagtct cgtttctaca 22260 ttggaaacag ttgtgcttaa aaagtatatg cccagtaccc gagtcacctt tacagagcct 22320 gctggccacg tgtcttagtt gccacaatcc accaagagaa ttatcaagta tgctggctcc 22380 cattccatga cctttggtcc aggcttgcag ggaacagtgt gtgtactgtg gactcagtta 22440 tatggaagca agtggggata gatgcagtat tttgtcagtg aatttaaaaa ataatctcaa 22500 ccttaaatga gatttatcat ggaaaaatta gaatttgttt ttaataaatg tggaccacaa 22560 agtcaggaat aatcctattt ttctaaggtc caaaagtcat cactggggac attgtcattc 22620 tgttccaaac tataactgtc ttttgtctca ttggcttctc tttcttttaa aggttgtacc 22680 taatttcgct taactgtatt ttgtccttct caattttttt tcctttcttt ggctttaacc 22740 ttgcaatttt ggggggtgat ggagagtctt gaacatgcac aagagccagc tgacagaata 22800 ttataaaact ctgtgttgct tctgcagtcc ttacaccata gccagtctgc cccatttcca 22860 ccctagctct gcaccctgcc ctagctcctg ttactttgac tttctcagtg tgtacccacc 22920 ttcaagggtc cttccccagc cctgagcttc cctgtcttgg tggtgaggaa tgatcagacg 22980 tgtgtgctta gtgctctgtc ccaggcctga ctggctgacc caggctttcc cctctcactc 23040 tggagatgcc tggaaattcc cagacattgc ctgtgccagc ctcacatgtt cagctcctct 23100 ttctccttcc tgttaatgaa ggagcccatt gctcaaatca tttggaaggg gaaaagtgga 23160 acttactacc tgggtgttct tcttccatgc tgttcgtata aatttaaact gaggttcctg 23220 agaattagat tgaacatgac gaaaagtgct gtgtgggcag cttcgctgag tacttgcaga 23280 ctgatagagc cttcgcaaca atgaaggagg gaggctcttt acgctgccta gctccagaag 23340 gtaagctcac cagttaagga atttgtatct aaagggcctc tttaaccctt tgatgggtag 23400 caaagaaaaa aaaacagaaa gaagaaaaga aaatctacaa accattccag atctggccct 23460 gaggggcccc tgagtgtttg tgccagacag caccctcctt gtgcgcgcag accttgcatt 23520 gcattcagat ttatgtgtcc tggaattttt cattacttca actccttcta agtttaagaa 23580 atageeteaa ateeteacea egteaeggee atggagtget geeatggeat geeateeegg 23640 tggtcaactt ttgtgtgagg agattacata acaaaatacc acatggaact ggaattcatc 23700 agtttgaatt gtccttctta cctagcaact ccgtcagtgt ttccaccaaa gtcagcggga 23760 ctttgcttgt accagttaaa agaggaagtt tattgtgtga ccacaaggtg atataagccc 23820 aattgttttt caggtgttta gtctgtctca gaacttcaga agaaccaagc aaggccaggg 23880 cctgcatcct ggctgcatga gttacccaaa gggaagccct ttctgttgcc cctttggtca 23940 gcttatcatt cctgagctct caaaccagat ttgtctcttt cttcaagctt ataggttggc 24000 aacactggtc atgaggtcaa gagggtaatc cccaagagca gtatgttccc atcacaggtt 24060 ggctaggagc ccatctaagt ccagcatctg ctgtttcggg gagaaaggga gtcttgtagg 24120 taatgatgct ccatcctctg cctgtactta ctgcattttt gacttgccaa acagcttatt 24180 tctttgccta gctacaccat tattcagaga tcaagacctt ctttggggtt cctgtttgca 24240 gtttagtatc gacataaacc cctcattctg gtatgcagaa tgaggccagc agccaaatga 24300 gaatgtgaac ctggtatatt ccttaaggtc cgtttgtgtc tttccattct ccggcggctt 24360 cccatcttag ttgaaataaa acctacgtgc ttcatcctga cccaacatgc ctactgttag 24420 geceatetae eteactagga tectaettea gttttteece tecetteetg cettetett 24480 gtttcttagg ctcctcaagc ttgctctgct cctagccctt tgttctggat atgccctgcc 24540 aaccattcat tatttgacat agtccaatat accttgcaga tttctgtgtg ttcttcagag 24600 aagccatcat aactaaactg agacatgccg agcattctct cccatgttgt tactttaccc 24660 aaagtccttt ttactgtcct aagtagacat cttaatctcg ctatttactc acttgccatt 24720 tagtctctct acactagaac agaagctcca tagaaaggac cttgcctgtc cttctgcatg 24780 gatatgcccc aggccccgga gaagcttgac acatacatgg taggagcttt cctagcattt 24840 gtctgatggc tgagtgagtg gcggtgctgg tcaagagcgt gctggagaga ctgctaggac 24900 tatgatataa ttcagaacca agctatgtgc tgtctcactt gtaggagagt agttctagaa 24960 gccctgggct gttggcacag ccacagctgt tgctagcctt tgcccaaccc tgttctactc 25020 tttctcttat acagacagat tcttgtcccc taaggacatg ggcttgttct gagcagccta 25080 taagctggag ctagagcaat aaataaaaat cctagggaaa tgttttggct ttgaaaggag 25140 tgggagatgc atacttgcaa tttttatctg aggatgaagt agactacact gagaagtcct 25200 gactttgaag tcacctaaag ctttcccgct cattcatttg atgtgaaaca ctggctataa 25260 gccttttctt tgtcctttaa gctgattaca gggtggggac ataactgata acgagcgtgt 25320 ggtaactgat gctgggaaat gggtaataag aagctctagg aaggcacaga aggggatgac 25380 ggcacaactt tgcctaggtt ctcaggacag tcctgccaga gaaagccctc tcttaccctt 25440 ccattgagtg tgagggaaaa catgagctgt caggaatagg cgtggaagag tgtacacaca 25500 cacacacaca cacacacaca cacacacaca caggatgggg tggggaggag aggaggagct 25560 ggagttttgg gcttgggaga gacaggcatg aagactgtta gtttcaaatt agtcacctca 25620 ctgtgagaag atagcataga gagaagaaa gaggagtcaa agcggtggga ctctggtgag 25680 ggatgggcag gcctggattt caaaaagagc actgtcttct gtgtgaagga caggtttgtg 25740 cagtggcagg gagcagtaag gaacttggtc agtcttcctt aaaggaaatg atggtcattc 25800 tagtaaagtg gggatgggtg gggaagaggt ctgggcaaac tggagaactt cagaaaatag 25860 agtgcggtat gactggtcag cagcggcatc ctgggtttcc tctgatctgc tccgtgaagg 25920 tgcctttgta gctttagtga atttggagag gacacaaatc ctgtttattg tagcagatac 25980 tattgtttct gtgcagagtg tcctgtgcca ccaaggccct ttgcagtaat ggtgcaggca 26040 cactcaagtg acccaggtct ggaagggcct atttttgccc taactaagtc aagactgcca 26100 atgectecat tteteceate eetgeetggg cagteetega tgetggeeaa geetetggta 26160 gttaagacaa gctctctgct tccagctaag gctgactgtc agctagagat ttagaaagga 26220 actgctgggg tttccaggac ttattcttct aattaaagag aactggagtt aatggtttag 26280 tggttgttcc ataatcaggc cctgctacaa gtggttaagg agcttggcag tgagaaccaa 26340 aagagccttc agggacaggg gtgtggctgt gaacaaggct aggaaaagga cttctgcatc 26400 caaagctaag aatgtggctt cccttgagtc atggatgata gggaggtttt tgagttgtgg 26460 cccattgaga cagaaaatta ggctgtttca tcttgtcctg gaagtgactg tggatggggg 26520 tggtggatgt gggggagtgg aggggggata aaaggaacaa aagcttggga gtcaagctgc 26580 cttgaaattg gggtttatca catcctggct gggccatgtt ggaccggtga ttagcagcct 26640 tccctaccct caggtgattt atccttgcaa tctgttgggt gtggttattc ttaatgttag 26700 gattagcatt tgaagggaga tgaatctcat gcctgattag cagttctatg aacatcatca 26820 ccaatattat gttcatgtag ttgtcataga ttatgaaata cttgactatt tttacatcag 26880 tgagacttca tctcactccc ataggctttt gtccactagc ctcagtgtat ctactaattt 26940 cattaggccc agttctcctt aaaagctgaa tttccatgtg tggatgtcta atggtggcat 27000 caaccagagg ctttattctc tttatcatgg gtttattcaa gaaagccctt cactgaggct 27060 agagagatgg ctcaccaatt aaaaggacat gtgttctttc aggactcact caggaggtgc 27120 acaactgctt tatctctggc gctagagcat ctcctggcct tcataagctc tccactcatg 27180 tacacaaacg ctcacattca ctctgccaaa aaaagataag taaataaaaa tgacatcttt 27240 taaaaatgaa aaaaaaagcc ctttctcata agtagaatcc ttgagaacag agcaagtgac 27300 caccaggagg atgccacacc catgaggata ggacaaggac cctgttgaga agtggttgcc 27360 ctagctgcac aactggattt gaaaaggtgg tttctaagcc ctggctcgaa tctattagta 27420 ttttacacaa gtgaagagat tctggtattc tctttgactc tttcaaagga atgtttatat 27480 ccctaagagc tttgcagcct tggtaaaagt gtgggacagg catgaatggc cttgggaaaa 27540 atctcactgc tcctcaaaac tcatgggagt cccctttgcc ccactagata gaaaactatt 27600 tttttttatt gtaaggagta gttttatatt cttttagtag acattaaagg gagcatttaa 27660 aaccatagca ctagtcctca gtgtcctgaa agccaacgct agcgtgctgg gctctgaggg 27720 ccattgtttt ccttcataga gtaaagcttc agtgccactg tcttaagagc tctgcaagtt 27780 cacattatga aaatatatgt aataaaatat ttatttaggg ttttcataaa aagtgtccaa 27840 agtagagagt aagagagtat cttgtgctgg gttgagaggc tctgcaggga attcagaatg 27900 aaattcaagt ccctcaaata tattttggtt ggcctccact atgttttatc tcctgtaatg 27960 aactctttgt cagtttgtca attttcacgg agttcacaaa gttcatgtat agtaacacag 28020 agccaggttt aaaattatgg tttatatcat gatgtaatag tcatctctct tttccttcag 28080 tcaatattta cctgtgaggc ccatatatta tatcctgatt tcaaaagaag accctttatt 28140 tetgagaett etgeetgtga tegettaaag tgeetagagt gteaggeate etgggtgggt 28260 teettgeace ttgacceage aacatageta catgeetgte agagtgagge tgeteaactt 28320 agagecagge tgetetatee cageteecca gacagettte teetatgaaa gataaaceca 28380 ttgtaccacc ccatagcagc catcagccag ctgccttaga cttgacttct cctttgtaaa 28440 cgctataagg ctgtacagaa aaacccaagg agcactcatg ggaggatttc tgtgtgtcag 28500 aacaagtgaa gagtaaattc tatccctttt taaaaattgc ttctttttgc acccattttt 28560 ttaaagcaaa ggtaagaatt agccctagtg atcgaggaat aggaaagaag taaaagctac 28620 aaatgttcca cgtcaactat ctggtgggcc agggacatgg tggcaaaggc tcctgccccc 28680 tetteaagtt ttettetaac atteatatgt acaccatgae atgeteacce cetecacaca 28800 catacccatg catacacgta catacgcatg catataaata agaatgtaat ttttaaaaga 28860 aaaattaaaa atgtctgatg ttttaggact ggtcacacag gtcaccaaag gagcaaatgg 28920 gggtatgcta ataagctcct tgatatcaga tgtgactctc atgagtcaga accgaaagag 28980 gattcattag ctcagaaacg tccaagtaga caaatagact aggttcaacc tcagctggat 29040 cctggagttc aaatgaggtc accttggatt ttcccctatt tcttagactt gttatttttc 29100 tatgttggtt tgagtatgca catgaaggta gttcctggca acggtagtgt tatactgttc 29160 ttcatttctg agttcacagg agagaccctc taggatgaag tccatgttgt cccctaaaaa 29220 caggetetga aaaaaaaat etatttatgt catatgeeca tgecaagaat agteaetgee 29280 aacaggaatg gggtgtaagg aattgtgtca ggtgcatgct cagtttaagt accttaaacc 29340 ctgtgcttgt atctccaatg tatctttatt tctctatgtt aaatgcctat tttatgagca 29400 tgttcttttt agatactgtc cattttgagt atttccataa tcacatacat aagaatatct 29460 atgtatgtat tatacatata tatatcaaca tgtatgtata tggcatacca tatttaaagt 29520 tgattaacag gacattcaag ggtaaatctt aagtttataa actacttatc ctatggcctt 29580 aatggacagt cccactagcc tggccactac ttctttggtg gcccttagaa ggattggact 29640 gaaggaagga aggaagggag gggaagggaaag ggaaaggga gagaaggcaa 29760 ggcaaggcaa ggcaggagag aggaacaagc agactattaa ttctacacta ggcctgtctt 29820 ttgcaaatgt ggtgatggat ttacccaaag atgagaagcc tttagaaatg ggagatactt 29880 gtgaaaacgg tactctcatt attcacaatg gaatccttgc cgtctgtttg gtgtggatga 29940 ggaaagagaa cagcatgcat cacagcagct agaagtagct ggaaagatta gaatagtgac 30000 ccacgcttca gggatgagcc tgtaggtatg atacacaccc taggaaagga tgcccaggga 30060 attotgotga cottocaacg aagotgatac coottotcat otgottacag gcaccttoga 30120 agtgggcgtc cacatcgccg atgtgagtta ctttgttcct gagggatcct ctttggataa 30180 agtagctgct gagagagcca caagtgtcta cttggtccag aaggtacaaa tcagctttga 30240 gtttctagac tttactaacc acttagtgtt ctttgttttt aatttgtaaa gaacatgcct 30300 tttctgaatg ttttctcaga tctagtagtg tctaaattat gaacttgatc ctgggaatat 30360 gcttgccttt tgctactgca caatttcttg aaagaagcca aggctttaat cccaagcttc 30420 atcttcagag tatccttgtg atattagtag ctgcaacagt ggtcagcttc agaatgaaat 30480 gaggggaaat gcttactttc aaactattgc tccaaagaag gacctgtgag acaccccaca 30540 ccaactgctg ggttctatac agtttggttg ggacccagca catccaatct cttgtgttat 30600 ctacgaccac teteacatta tagtaacaga gtggaatgac aatttactat etacaagage 30660 ctttgagaaa tggtttcagc ccttgttcta aacgtgggca ccaatcctga cctacacttt 30720 acaggtagca cacagagtcc ccatgatagc ttttgctgtt agatttccct cacctcagct 30780 atgaaaggaa gaaattctaa cccctctggg gaagaagact cagaaagtaa actatctgcc 30840 atgtgaacat aaggacctga attcagatcc tcagcaccca catgaagctg gcatgatgac 30900 atgtgtctgc gatactggca tgagtgagag tggagggggc cagaccccag gactcactga 30960 gcagcaagtc tagccaagca gtgagtgtgg gctttggtga aagcctgtct caaaaagtaa 31020 aacagagcat gatagaggaa gattctgcct ttgatcttta cacacacgtg tacacacaca 31080 cacactcaga ggcaggtgga gaaggagata tatctattcc atcctatgta actggtacat 31200 ccctacaagt aactatgaga acccatccct ttaatgtgtg tttaccaagc accaagtgtc 31260 tactaggcct tgcagtaggc ctgaagataa ataaaaatac acatgtgact tatctctatc 31320 ctccatggtg gttcatgagt tcttccagcc tttttgttct ctgacaatct gctcacctgc 31380 tcattttggc tcatcatttt ttgggctgtc ttgacattca tttcctcttt gctcccatga 31440 actgaatggc ttgaaccttc cctcccaaat gccatgttct acaacatgac ttttggtatt 31500 taatcatgac tataccaaag taaaatgtct gccccactc ctgacaaccc aacccaaagc 31560 attettgaag etggataetg ettgettgge ceageaatea gggaeeagag aetageeagg 31620 tgacacacct actccattct tagaatttcc aaatgtcatc actcagggaa ggggtacagc 31680

ttcctagtct caccactaca agctgcctgt gtgcccacac ggttggcaaa aggaacacaa 31740 ggccatgcac tcagcctcac aagcagtgtg ctctcatggt ctgcctgctg cctctccagc 31800 tctctgttta ttctaggtag aatggttact agagtgtcca gctgaagttc tgaggtctct 31860 gcctgcatag ggaaccttgt ggaggattaa aaaggggtcc actaggatct aggttttcac 31920 atacctttgg tcctgaacat ttttatcctg tttataagac aacctctcct ttctcttaag 31980 tettgetgge ttetettget ecetecatae tttgacaaac aagacettga aaacacatge 32040 ttttctggct gtcttaactc ctatttcatg atgctcccaa gaaaagttta gttctttggt 32100 aattatgttg tctagatgct gttaaggcag gccatagagg cacagattgt aacaaacaag 32160 agagacactg teteaageaa gttggaaggt aaggaceaae caccacteat ggttgteete 32220 tgatctccat tacatgcacc atggcatgtg catgcctgca ctcatatata cagaaaatgt 32280 acactcatac tattatgaga gtggccttca ttcaactttg tatctcgttt tggtatctat 32340 actaagcatc ttgaagaaaa aaaaacatta aactcctggg ccccccttct tagcttgacc 32400 cttctgagag tgcagttctg actcttgtac aaatgactcc acttgacctc aggctgaagg 32460 cateceatga gtactteetg cetgatgetg atgetgeeca aacetggett tteeetggte 32520 cagacttaga agaaggaaga tgagcttcta tcccttgtag ctacaaaacc tctagtgtag 32580 aaatgggaag taattgcata cacttaaagg ctgtcaagta agtaagtaag tgtgaaatgt 32640 tetteatttg caagtttaac tetgecettt gatgagaact ttagacecea ttggageete 32700 ttcatctagc gggtggcttt ctcctgtctc acagctgcag tctcctctta tgaccaggaa 32760 ttctgtatca aaattagaaa ccaaaagaat gaaattgaat taataactag tgtttccctt 32820 tetgtteeet ttaetttggt attgtgacaa teacagttgg agaatetett tggtgetggt 32880 ggggtctggt gctaaactgt aaaggtaggg ggctggtgga agaagggctt tgaacctcca 32940 ctgctcagcc ctgcctccag cttggcagga gcttaaggtg ccggcccaca accttggaca 33000 gcaggagctg tgcattctga tgcctttgaa gcactgctct gacctttctt cctactcagc 33060 tttgtttctt aaagggctgt gtccaggaac tttctgctgg tttcacttta ctttgcctat 33120 aaaggtetta aaagcgagtg ggetgeettt eeetetgeat attetetgtt eteteatttg 33180 gccaaatcat tttttcccaa ctctatcact ccagggaatg ggggtgggag ctccagtaga 33240 tttcccatct atagatgtag agtccaaaga gttttaagat gttccttcct gaccccagca 33300 ggttatcagt ggtgctgttt ggttaatgtc aaactgggag gcaaagggtt gctcaaattc 33360 tgaatttccc aactcttttc ttttcactga gatgtctact tataagtaat ggttagagtc 33420 acaatctaag cttggttttg ggaatgatcc cagagaatag gacaatatac agggaaccag 33480 acttgggtcc agatcgtagc tcactggctt taaatgaaat tcctcttgtt gagatttgac 33540 tcactgtgta aggactcagt aacacaagtt aacaagggaa catagtcaag agaaagataa 33600 attaaataat gtctgtttaa atgttaaaac tcacccttcc ttttgacaaa aattgttctg 33660 ttaggatggg gacaactgtg tatctgaact tgaacctatt ttcagaggct gtgacatctg 33720 ctcagctaat atcttctctg ggaaagaaat acaatttatt tttaagtttt aaggtaatta 33780 gaaaaaaata aataagtgaa ttaagtttta aaagtaaaag aaaacctaaa cagtcgaaat 33840 ctaaacctaa gctttgtgtc tgctggccca gccatgcatg ttattttagg tgtgaaacag 33900 ctcagatgaa agctcgccca taaatctcga ggatatttta ttggtagtgc tttataatag 33960 agatcaaaga ttgggattgg aagcctgtct tcatgtagaa tccaacgagt tttaagatgt 34020 teetteetga eeceageagg ttgteggtgg tgetgtttgg ttaatgteaa aetgggtage 34080 aaagggttgc tcaaattctg aatccatgga tgtgttgata tgaaaaagga gaccctttca 34140 gcagagatgt tggctggcaa agatattatc tatttccttt aagtttcttt agtctatgag 34200 tggggagcta gctgagcatg acttggtgtg aaaacttcca agtcctaagc aaaggagaaa 34260 accctgactt gccatgctgc agatctgggg tgcactgagg gggtgagggg atggttacct 34320 aaggagccag ccagagtgtg aactctcaga cagtaggaga cccccattac ttgtgagtgt 34380 ctggcctgat gtcactgctc atccttcctg ttcctccgca cccagatgat tgattcttcc 34440 cttctgtggc cctttcaact ggtcacaggg ctgtcctggc tcacccactg ctgaacttgg 34500 ccagcctgcc tgctgtggct ttagcagatg tttctgctct ctgaggctca tgttaggttt 34560 tatageettg ttggtaceee cacceageag tattgggeag tggtgtactg acetaaatga 34620 ccagttccct caactctccc aagccctggt ccagaatgct tagaaagtca gggttctgtc 34680 atcactcctt gctctacagc cagcctttaa gctatatcca gactgaactt tgggcttagg 34740 tctgaaacat tccccagttc tctgccctca ctgctgccag atctatagtt cttccccact 34800 tagcaggact gagagccgcc agtgtcaggg atgcaaaact gaaagggata ctggtcctgg 34860 tectgateag aaaaggttga eacattataa geaettetag taeaetggae tgeettagtt 34920 acagaagtac agagaggaaa gggaggtcat gtctccttgg gttggaagga ctgggggaca 34980 gcttctgcaa gagtcaagaa gatgtcacaa aggccagctt tgaaatgtct cacattttag 35040 gagaatgtct ggatagaaag aaatagtttg gggaccttcc atacagaggt ttaaaaaaaa 35100 aagtatgctc agaggctgga gggatgactt ggcagttaag agtctttact acttctggaa 35160 gaaacccaaa tttggttccc aacacccacc tggcatctca caaccactag ttatctccag 35220 ttccaaagga tettaeettt eetggeetet ggtggtaeae agageteaea taggtgeaea 35280 aagagagaga aaataaaggc tttagaaaca ctgtttgagg aacagatgta gtgtgacctt 35400 gctggggtat gaagttggaa agaggcttaa agtggcagac taagcagcat gggcatcett 35460

caaggtaata ggttatgctc agttttgcaa cagttgagtg gccttccttc taagtagaaa 35520 ctctcttgag tgctctggat aaaggaaaat tcagccagag tcagggctag catatcagta 35580 tragggtetg ttecacatea etgeceettg aaactttgag taaatgeeee gacataggea 35640 gagacacttg ttcatagact aaagtattta tcaatgctac agaatcatgc tggacagtca 35700 cctccaatgt cagcaatgcc tatcacagag caaaaaggaa agagaagcaa ggggtgggga 35760 aatggagaag ctgtttctcc aggtactgct gctgcctacg ttgagataaa tacagagggc 35820 agattetece tagtagttag ettttagtge atgtgaetet tggeeaetga ttgtggggae 35880 ctaaccctgc tctttctatg ttttgttttt gttgtcatag acttgaggtg ttattgtata 35940 gctcaggatc tccccacctc tgtcatcata tcaaacctat agatctagtc tttagtgaac 36000 acttectgge ccaaccaaaa gtatetggga cetatteate aataggagae caaaatecag 36060 ctcacccagc acatggaatc ctgggaaagg gaaaggcaat aggacctgat ataaatagga 36120 ttgcaggtta tcaccagata cgaaagaaga tgcacgggaa gagagacagc tcagtcatta 36180 ggagcacttg ctgcataatc atgaccaaac ctcaacgata tcccagtagc cagatgtcct 36240 tacaaaacac ctgtaactca tgctctggag gatctgatac cttctggtct ctgctcgtgt 36300 tcaggtacac acagctatag ataaccacat acatcatgca ggcgcacaca cacacacaa 36360 ctctaaaagc aaagaatata ctgaagtctg gagtaaagga aggtgttatt cgcctcagca 36420 acacacatat taaaattagg atgcatatta aaattaggat taatactgcc cttgagaaag 36480 gcttatatgc aaagttgaag agcgtccata ttttaaaaaa taaaaattac tgaggcaaac 36540 tttattttcc tggttttcca ttattttcat gaaatatcta aagctaggta tgaggtttat 36600 taagttcaat tttgtatctt gactctttgt ttgatagttg tttgattggt tgatttggtt 36660 tgcttttatg ttgttgctgc tattgttgtt tgttttagtt ttgagacgaa atgtcatgta 36720 gcccaggccg actttaaact cttcatgtag cccaggctga ccttaaactc ttcatgtagc 36780 tgagggtggc cttgaaccct tgatctcctt tcctctatca cacaaggata agattaaagg 36840 tgcatgctga actttgaaga ctggaagtcc aaatgacata aggccacctc tagtgagggc 36900 ccttttcatc tcttcaaggc agatagtatg gcaatgactg tataaaaaga aaacatcata 36960 tggcatgtca gacggctagg atgaaaggag gagccagtat tagcctcacc tgtcaaagtt 37020 cctactatct gtcaacactg ctctactgag aaacagtctc tgattacaca aacccttgat 37080 qaqaqaacat tcaaatcatc tctaaattat aacagaagtt ctaccaacaa tgattccatg 37140 aagagetttg ceactggtat aggaaactat agactatate caaaaaggga aaaccagtgt 37200 ccacatttga acactgtaaa tggagacaaa gaaaatcact tgatcgaggt ttagaatgcc 37260 agaccttaag cacaggcaga ttgggtgtta taggccagga ctgttgctgt cacaaggtaa 37320 ccaatagttc aggaggtgag aggggatggg gaagtagaaa tggcagtgtc ttgtttctta 37380 agtgatttgg ggaagttttg ttgcttattt gttcatttga tggaggataa ggtactgttc 37440 ttatagaaac atcagtacag ggagggtgga aacacacaaa gggaagaaaa caccaggctc 37500 gagtetagat tecaagaaga ggeaggete agaatgeaga ggacagaaac caaggagaag 37620 gaggcaggaa gaagaacaga ggacagaagg taagggccaa ccaagaaggg agtacaggaa 37680 aggccagtct tgagtgttca ctggttctgt attttaaaaa caacatgtgg ttatagatta 37740 tataatatat attactttcc atatggtcat atgtacacaa atgaaacgca tggatttcat 37800 gccatcatgc taacattcta agaaccggga tcccatggtg tttgtgcttt caagtcttgg 37860 tttatagaat ctaaaattcc tacaaggaat tttacaagga gtgtgtaact ttgataatta 37920 agagaaaaaa atgaaagctg agaagtataa accattctga gaagcttcaa gtggagcaac 37980 tggagtgtga ctggcagagg aatatagtct ggagttaagg gaagctccac ctttgcactt 38040 ggggaatcga accagatgag cagggagatc actagctaga gctccaggct gaaggcagga 38100 gacacttgcc atgagataac aggaccaggg catccctgaa aagctaggga aaatggctca 38160 agagagtagt tgatggagag tgctagaaaa ggcttaagtc taccttctct gtgtacaaga 38220 gttgagtttt ctgctgagaa agaatgagaa ggtagaagaa ttggaggaga gaagtaatgc 38280 gtgtgaagcc tgggggaaga tgctatcaag gcatggcagg agctgagact gtttgttgat 38340 gcatccctat atagcccage atgttttcct gccaccttca gtgtttagcc agtagggtcc 38400 caagaacaaa gaaggcacac tgtgagattg gttacatgac ttgcagttag gacagtggag 38460 ttgggcagct ggggaactgt ggtgaaagtc cataataaac agggagggat acaggcaggg 38520 ccaagagaaa actaccaagc cccacggaag cataggcact ggccctatgc tttcggcagc 38580 aggactttct ctacacagag atcetteetg gttatettgg tactetgeac etcagteegg 38640 cccagaatct ctccagagag tgtgacgagc ctcacacggc caatgtgctg catggagtca 38700 ggcagggcat ctttcttcct cctcatctgc ctgggtagag ttttgaaaaa gtggctttaa 38760 agagaatagc cccaccttgc cagtcctctg ccacaggaaa gcctgctgca ctccgggttg 38820 aacaggaacg catgcacagt gacccctgga ggaccagtgg atttatgaga ggctgtgatg 38880 tgccaaacca caaatgtgat cgtaacctct taatttcttc tcctttgaaa ggcagaggcc 38940 taaccaccta tttacaaaac tggatgaaca tgcactgttt cctctgaatt ccatctgatt 39000 ccttacccag aatctagtag aaagtgtatt aaaaggactg tcccttaaaa attaaatgca 39060 tttctgctgc cacagcttct tcatgaaact tgaggtcttt ggcatctgac cagtgggagg 39120 agcaaaacag ttttgataac caggacagct acagggtata ctagtggatt tttttttcc 39180 agagggttgc caagaaaatc tttcctttct actgaaagta ctaattgcta tgggcatttt 39240

tttgagaaag atgctactat agaatatctg tcagcaagga tttcataaac tgttgggatt 39300 tggttttttt atttgtttgt ttttgttttg ttattgcacg aatgtgtgtg acagacagac 39360 agagagaaag agagagagag agagagagag cacatagaaa acagcaggat atttatctta 39480 taccaaaagc catccatctg tgcactaata gtgcctgcct gctgtgtgga gtagatagaa 39540 ggacaaagcc agactgactt gcctttgttc ttgggggttc catatcctgg gggcacctaa 39600 caagggatca ggatacaggg tggtcaggac ctttccaagt gctgtagaag agctcggagg 39660 gtggagtaag tagctaattc tttgggactg tcccacagcc tctgtgaaag atcaggggaa 39720 gttatagaac agtacattct ctgcctgggg gagtctggag aagcatggaa atggcaagga 39780 tctgagtgta gaaagatagc caaagtttgc ctgaagcaag gtgtccagaa aggtgttcca 39840 gaaaatggga acaccatgtg cagaagctgg agcagcgagc aggcaggcag gtgaagggct 39900 cgcagcgggt gggcccatgg gctcgagctg tgtgtgccct gcacagggct gaatgcgggc 39960 tgagccaagt ggcacagggc ttggacacct tcagctgatt gttaatgcgc atttcagagc 40020 aatttcgctt tgaataaaac ccatgttcag aatcgttcta gcatgttggg ttatcaagaa 40080 gtgctgggct cagagtctga ctcgaggtcg ctgtccaaag cctttctgat ttccacctgc 40140 tgctacctcc tctgtactgc cctcagctgc ttgatgatct taagacctga gctctacccc 40200 ccttttcatt ctatacataa aattttagcc ctttcttgtt tatgaaaata gatcaagatt 40260 actatgtata aaaaacataa aattatatta tgtataacat agtttataaa tgcataactt 40320 aagagatgcc tttgggacac tgctattaac tgcatttcca cctttatttg gacttcacct 40380 gttttttcca tcagtgtttt ctgtctcggg gtccagtcta ggcccaagat acaatgactt 40440 tcttttgaca aacactaaag catgatgacc aaagtcatgt tgtgactaaa agtcttataa 40500 ctgaaagtat gatacttcct tgaacactgt ccaattaaaa gcaacaacaa aaataaatat 40560 tgagctctgg actaattgtt gcagccagtt gccacagaac atctggtgtc gtcatctggc 40620 aatgaaaccc agaaaacgtg tgggttttgc tcagcctcaa tgatagtgca ccacagactg 40680 ggtgacttca ccaacagacc tatatagttg ttcccagctt caggtgctag ccagtgtgat 40740 teetggtgaa aacetacete teteatatgt ggetgtgtee teatatggee ttacetetge 40800 acctccatgg agagagggac tgtgtgtttt tttgtcctct catccttaaa atcagttttg 40860 tgtaactagg tcccaccctt atgacttcat ttaacctttg taatcactta ataaccctgt 40920 cttcaaatac tgttaaactg gagactacag cttcagtata tcaatgggga ggtacaattc 40980 ggttcacagc atagttaaaa ggctgaaatt atataaaaaa ttttaacttt gtaactttgt 41040 cacaaaacag tgtatatgac acaaaaactc tatagtgtgt tggtgtagat gaagacgcag 41100 tttggttttt tcgagacaga gtttctcagt atagccctgg ctgtcctaga actcactctg 41220 tagaccagge tggcctcaaa ctcagaaate cacctgccte tgcctcccta gtgctaggat 41280 taaaggcgtg cgccaccacg cccagctaca atgctttata aaacaatgga catacaagaa 41340 aatgtaacat attagaacac attttaactt attactaaag ctaatggggt gctgaggcta 41400 cagctggcct agcatgcaca aagccctggg ttaaaccccc agcgcagcat aaaccaggta 41460 tggttgtgca cacctgtaat cccagcactc aggaggtggg gaatcacaag tgcagagtca 41520 tcttcagcaa agccatcctt tgaggcaagc ctaagcaaca caagaccctg tctcaaagca 41580 aacaaacaaa aaccaaaata tcaaagtgtt tgcgtccttt gagctgacgg tattaaaaaa 41640 aaaaaaaaa aagaaacaga caagagaaaa caccctatag gtggaacaac aatatgaact 41700 aaccagtacc cccagagctc gtgtctccag ctgcatatgt agcagaagat ggcctagttg 41760 gccatcattg ggaagagag ccccttggtc ttgcaaactt tatatgcccc agtacagggg 41820 aacaccaggg ccaagaaggg ggagtgggta ggcaggggag cagggtgagg ggagggtata 41880 ggggactttc tggatagcat tagaaatgta aatgaagaaa atacctaata aaaaattgaa 41940 aaaagaaaag aagaaaaaga gaaaacttca ataacacttt catatagaag ctgttaccaa 42000 agttttcaag taatcactgg gtgtaaaact tctagaatac tgccaaacac ctattaattt 42060 ctgttaccaa taccagccat gcatcttcaa tttcttcttc tacatcaagc acatgctttc 42120 tatggaaaca gcacattaca gaaacttcac aaagtgagag aaaccatggg gattggtttt 42180 gattttacta ataaagaaat ttactaaatt tacataaatt cagtgtaaca gccctccctt 42240 cccagtaaat tgaacccagt acagggttca acagtatatg tcaagttagg ccacagtaag 42300 tataggaaag aaatggttta taatgctatt tcaatttggg aaagagtgta ggtggtaata 42360 ttataatcaa gaaaaatatg ggagaaggaa tagatttgaa ggcaggaggg agagaaggca 42420 aagtatettg gtggggaaaa caaggagaga tactaatttt tttetggtat tataaataat 42480 attcagtgac agctatttct tataatttga agtatcttaa atacaaacta ttttgttttt 42540 tgacctggaa ctctctatgt agaccaggct ggcctcaaac ccacagagat ctatctgtct 42660 gcttctactt ctgccttctg agtgctagta ttagtgtgtg ccaccataac cagcaagatc 42720 agtttattat tatgagatta aaatgataag tgagataaat aattcaggct ttaaaagctt 42780 caaaaatggg gctggcaaaa tggctctgtg gctaatgtgc ttgctgtcaa gcctggtggt 42840 ctgggttcaa cctctagtac ctacatagta gagaaaacta attcccctac acttccctga 42900 ccccacatgt gtgccatgct gcacacacac acaaataaat agtgcatttt ttgaaaatcc 42960 tgaaaaatgg gtgattggtt ggccaatatt catctataaa tctgaattta tgaacttcaa 43020 ttgtaatagt tatattgtat ttttctgttt atactccaac ataattttgt aatttattgt 43080 atattcaatt actaaattaa aaactggtta ttttgccctg ataagatttt atatttagac 43140 attgagttct taagaatatt attcaatcag aacagttata tcaccaaacc tcccccatat 43200 totttaaata tottatttta tottatatat acactttgtg tatgtctggt acccataggg 43260 accagaagag ggcatcagat cccctcgaat tggggtgagc cactatgtag gtgctaggaa 43320 tcagacctct gcaagaatag taagttctca tagctgctga gccatatctc cagctccctc 43380 ctcctgtagg ctccaaatct tctccaaatc actcataatt attaatgtag tattgtattt 43440 tattacttag ggaataatga caagaaaaaa agtatatata tgcattccct gcagataaaa 43500 attttttaaa tgaagaaatt ttttcttgcc ttggcagaac ctagggatgc agaagttgga 43560 ctgtaactac aaacagtgac agtgtttctg tccgatatct tccctttcta cttcccaggc 43620 agagctgaga cagtgtacac tttctgcaga ggccactagg agtgagcctg cttcatattc 43680 agetecetet ggaageteae cagaactgge atetgggeta tgeetgagtg eetgaggeag 43740 gettetgegg getagacaag gatgeteagg aacteteete tgtteaeagg tggteeceat 43800 gcttcccagg cttctgtgtg aggaactctg cagcctcaac cccatgactg acaagctgac 43860 cttctctgtg atctggaagc tgacccctga aggcaaggta gtgatgaact ctattttatc 43920 attcattctc cacatacatt gtctcatcct atctcttgtg gtaagcaccg tgtcctgcac 43980 tagaccacag ttccacagtg gatggatgca gaggtctgga gtggctgctg tagggaagaa 44040 gtctaaggac cctagctagc ctcagaagag ccagtcctac ctaggaggca aggctgaccc 44100 tactcagtgc cagtatttac cagctagcaa ggagcactaa ttgtgagatg ggagctatgg 44160 gtggatgatg gcttcagtga cggtgcatat acatctggaa ggcagctaga aggccaggtt 44220 gtaaacgaat agtgggagtt ggtgttcctc tgacatgtcc tgaagaagac agccatgaga 44280 gcttcagttt cctgggagat ggctgggatt atgaagatta gcaaagatga gtagagtaac 44340 acttgaatca gagcatgagc taaggcaaac agagactaga gggtgtccac aagtactccc 44400 tctacacggg agcaaagaca aggagcaaag gtgacacttg ggagaaccag ctccccctcc 44460 aaagtgagca accacaaatg acagagtcat cctggagggc ccagggctta gtcaggcagg 44520 cttctgaaaa gctggttgca aatattgtaa aggaatatga gaaatatata tgctataata 44580 atagatggga gccaaaaaag atttatctat aaagaggttc caaataaaga tggaaggtta 44640 aataaccaca ttgattttta tcccatccca aaagttcact aaacaacagt aaagagatta 44700 aggcataatc ccatagtgac acagcacgtg ggcaaggggg caacagcaac acagctggag 44820 ccaggagggc gagcatgggg agtggcaact gactgagcag acctggcaag cctgagcctg 44880 agccaggcct ggagggagcc aggggataaa cattgagaca ttgacagcac caggtaatca 44940 actggaaggg gatggctgag aggctgacaa cagctttggt ggaaagttca ttgaagagat 45000 tgacccctgt ggtcttagca gaagacctag agttttttt ttctctatag agaattaact 45060 ccaggattct aggagtcagg cctgtgccct gtgagtcagg aggtggggat atctttctct 45120 gaggaatcta agtaatcaag agtaaccagt cagcagcatc cttaaggacc ttccaaccag 45180 caacccaaca ctgtccagtc cagtccagtc cagtccagta aagcttagag gtttgaccta 45240 catagtgaga gcctttggga tttcttcgct gctgctgctg ttgctgctgc tgctgctgct 45300 getgetgetg etgetgetge tgetgetget getgetgett ettettette ttettettet 45360 tetecttete ettetectte teettetet tetecttete etteteette teetteteet 45480 teteettete etteteette teetteteet teteettete etteteette teetteteet 45540 tetecttett tetecteete etecteete tettettett ettecteete etecteette 45600 ctctgtctct ctctgtctct gactctctct gtctctctgt ctctctttc ccccctcctt 45660 cccccttttc cagacagggt ctcagtatgt agctgtggct aacctagaac ttgctatgta 45720 gaccatgatg gtttgtaact cacagagatc cccctgcctc agcttcagct ctgctcctgt 45780 caccatgccc agctacggta tttcactttc atgcatgaag agacaaccaa ttggaaagca 45840 tcattcctaa aataaataca gcagagcaca catacaagga gaaggaacca tccttgagaa 45900 ccattagaga attttaaaca gaagctatct attctatgat agctaacttt aaagagctgg 45960 attgggggag ggggggcagg acaaggagat ttttagagat taaaaacagg atagaaataa 46020 atggcgattc atgattctga tttaaaataa agttgaatgt tccagaacaa tcaaagaaaa 46080 cacacacaca cacacacaca cacacacaca cacacgcctg aacctgctct atgacagttc 46260 cagaaaccaa agcagaggaa atgggggaaa atgctgaatg aaactattca ttctttttt 46320 gtttgttttg ttttttttt tcaaaacggg tttctctgtg tagccctggc tgtcctggaa 46380 ctcactccgt agaccaggct ggccttgaac tcagaaatcc acctgcctct gccttctaag 46440 tgctgggatt aaaagcgtac gccagcactg cctggctgaa accattcatt cttaaaggat 46500 gtgactttgc aggtgcagaa agctcattgc aaccccagtg gtggggacat gccatcccta 46560 atgtacaaac ccttatagag tctcaggata taggagacaa ggaaagaccc agaggcctta 46620 gaaaggccaa aggaaggcac acatacagta gaccagaagg taaaccgagt tcagactctt 46680 tcactccagt ctcagaagct ttgtgatagt gcagggaaaa ctccctgtct agaaggatag 46740 gatccctatc aaatataccc tgctaagctc tcagtaaact gtgaaagtca aaaggcgtgt 46800

```
cttcaggcat gtgcagtctc agaaacaaag cagaacttac aaagctcttc tttgggaagc 46860
ttcataaggc cttgttgttg attctgtaat catagaagcc aagttatgaa tcttgtgagc 46920
tgaaagccag cctgggatac tcagaaaaac tgtctcaaag agaaatagaa atgagagag 46980
agagggagag ggcaggggag agggcagggg agaagggaga gggcagggga gaggggaggg 47100
aaataagaaa gaagaagag agaaagaaac tgctggatta aagagatggc tctagaggta 47280
aaaatacttg ccatacaaac atgaggacct gaattcaaat cctcagaaac catataaagc 47340
agggcagggc agggcagagc agagagcatc cccagaagct ctgggccaac tgccttaccc 47460
aacacagtaa cagacaacag aaaaggcctc tgtgcactgt gacaggagtg acaacataca 47520
ctcaaataca catacatgca cacatgcata tatgcacagt atatggagtc atcagagagg 47580
gacacaccag taaagttcat gcccattcaa aaaagggaaa agggcagagc agagagctgg 47640
ctgtctcttc tctgacatgt ggaagatgct gctgagcagc tgctatgttg gagctgtgga 47700
aacagteete accaggactg aactggetgg caettgatet ggaactttta geetteagaa 47760
ctatgggaaa taaatttcta tggcttaagc cacttggttt gtggtatttt gttatagcag 47820
cccggacaga ctaacacagt atcagatgaa ctttgttaat caggttacat aaaaatctac 47880
tgagaataga acttttagcc aggcatgact ttttaatgta tactggccat ttagaaagta 47940
ctgacttaat atgctgatct ctaactgtgg gcacatttca atatatagta ttctaaaaac 48000
cacattgtta tegteattge tattettaet ageceaacet ttteagtatt aggaageeca 48060
caagttcatg tatcagatgc aagatttcta gaattctaat cttgtaaaaag tttaatttgt 48120
atcatgagtg ataaacaatg tcatttgttt ccttgaagca ctaaatacca aagtctaaat 48180
aagcatggtt tocaggtcag gtgttoottg agataaaaat ggtatttttg aaagaatact 48240
atatctatca gttcagctca cagctagcta tgtgcacact tttcctccaa aggtcatcct 48300
ctgcctcatg aagaatagtg acaaagataa gtacttggag ttgagacata gaaagtaatg 48360
gcttttactt gtcccatgag aacattctag ctctctttc cctgccagtg tatggtgggg 48420
aagtagtgtg accactgtgt cctatgcagg tgaaacattt tacctgccag accactagac 48480
cagtgctgtg aatggtaata tacaaagcag actgtgtaac gccctggact atggctaaaa 48540
acattttgga ccacataggc tactgaatgg ggctcgagga ctcccaagag tccatgagcc 48600
atattttaga gatgaactcc tatttaatca aacaaaccaa aacaagacaa atatgaatct 48660
gttagaggaa aaggetteae aaggaatgea gegaeaette etetteetat tgeeacagaa 48720
gcgcctggat acagggagtt caaagagttc tgagccagct gtagcctggg ttgcatagtg 48780
agcactaggt cagtcaaagt tacataccaa gaccctgtct cataaaaaaat aataaaacaa 48840
aacagaaaaa tagtattaga atgatatgtg ctttaattag aaaaaattca actatatgta 48900
gtataaggaa aacatcacaa taagccccca tccctgtttc ccagattcag tactgtcaag 48960
ggttcattct ctgttaagac tatagtattt taaaacaaac cacagacatg tcatttcact 49020
catgtgtgtt ttgatatgta actaaaaatc tgggcatttt cttatataac cacaatgtcc 49080
tcagcatacc taacaatgag ggctggtatc aggatgccat ccaaaaccta gtccctaata 49140
tatttccttg gttctcgcca attgattggt ccaaactggg atcaaataaa gctgtacaca 49200
ttacatttgg tttttatagc tcttaattat ctggtaaaaa gtttcttttc aagctctaag 49260
aggcaaacat tatctgaact acagagaggg agctatgagt gcagggtgcc agcagccata 49320
atctggggga ggtggaggca ggcttagggg tggtgaatgg aaaaagacca gaaggaaata 49380
acacaaaatg ccagccgtgg ctgtattttg gatagtaaga ctgtgagtaa ttttttctat 49440
ttttttctat cttctaatgt tttataaaaa tatgaataac ttttatattt ttataatact 49500
tattttttaa aaaaataact aaaaaatgac taaagaaaag aaaagcccat agaattatcc 49560
tacctcaagt caatagaaaa gaacactgtg tctgaatttg ctaccagggg cagacctgag 49620
aaattaaaga tgcctgatct aatgtgcttc tagaatatgg gggtcataaa agaaacacta 49680
ggaaaatgtg aactccaaca ttcactggcc tttgaagttt cttttgaaag caggtatatg 49740
gaacccagac cttctgctca atgagggcta gaagacaggt gtaaaagagg catgggtctg 49800
caagggtgct gagccttcct ccaaaccaca ccagatagga agtatgaggg ctggtactgt 49860
agacagggtt gtggggcaag gcccactgac cacactette attetgtggt gacccagace 49920
cagtgaccac atgagcgata gatcatttgg taagcctggg gatgaggtaa catctctcct 49980
                                                             49999
tcacagtcaa gatgcccgt
```

<210> 11 <211> 49999 <212> DNA

<213> Mus musculus

<400> 11

aatgaaaggt tcagtaccac actctaggtc caagggctga cagtctagga cactagagtg 60

gaaagcctaa actaagcttg agaccaggta ggaggtcagg gtgccataga aggccctgga 120 agcaagagcc caggtgaatg aagaagagca tgtccaaagc ttgtgtggct gaaaccccag 180 gtttagtttg caggttgtga gggcttatct tggtatagag gcaaaaggtt ggaaggagtg 240 gtaccggagt ggacaaagct ttgcaatctt ccttaggcta ctacaatatc ctgctttctg 300 aggcaggcac tgtctgctat gagaatgctg ccccagtgta ttttgtgatt gttgttggtt 360 ttttttaatg tgggtatttt cagcacctgc aagaacattt ctgcatccct ggagctagtg 420 ctgatggcac tctcctttca catcagcact tctctctct tttctccatc cttccctgct 480 cttcatcagt aaaaatgctc ccattgcaac ctgaaaataa gcccctgtct tctggatctg 540 ttaatgcccc tctcacacat ctgctacatt gagcaagtca aagctgttca gctgtgcctc 600 tecteagagg ggaageetet ttetettagt acagtgacta cettaateee agtecaettt 660 gtcttattct ggggccttct agaataaggc cattattgtt tccccattag aagctgaatc 720 taattccttt atataatttc ttcatctcct ctggccacat gtcctgatta accccaaaag 780 tccaatcttt ttttttaata tttttattat tatgtatttt cctcaattac ataattagaa 840 tgctatccca aaagtccctc aaaccctccc ccccacttcc ctacccaccc attcccattt 900 tttggccctg gcgttcccct gtactggggc atataaagtt tgcaagtcca atgggcctct 960 ctttccagtg atggccgact aggccatctt ttgatacata tgcagctaga gtcaagagct 1020 ccggggtact ggttagttca taatgttgtt gcacctacag ggttgcagat ctctctagct 1080 cctccattgg gggccctgtg ctccatccaa tagctgactg tgagcatcca cttatgtgtt 1140 tgctaggccc cggcctagtc tcacaagaga cagctatatc agggtccttt cagcaaacgc 1200 ttgctagtgt atgcaatggt gtcatcattt ggaggctaat tatgggatgg atccctggat 1260 atggcagtct ctagatggtc catcettttg teteagetce aaactttgte tetgtaacte 1320 cttccatggg tgattgtttc caattctaag aaggggcaaa gtgtccatac tttggtcttc 1380 gttcttcttc agtttcgtgt gttttgcaaa ttgtatctta tatcttgggt atactaagtt 1440 tctgggctaa tacccactta tcagtgagta catatcattt gagttctttt gtgattgtgt 1500 tacctcactc aggatgatgc ccctccaggt ccatccattt gcctaggaat ttcataaatt 1560 cattettttt aatagetgag tagtaeteea ttgtgtaaat gtaceacatt tttttgtate 1620 tattcctctg ttgaggagca tctgggttct ttccagcttc tggatattat aaataaggct 1680 gctatgaaca tagtggagca tgtgtccttc ttactggttg ggacatcttc tggatatatg 1740 tccaggagag gtattgaagc atgacttacg gaaaccagct ctccccctgc atagccatct 1800 gtcaccacca tgcctcagcc ctcatcttct gttcttgcta ctgaggggtt ctttaagcct 1860 aacagggact tgtcactgaa actccataca tacttggtcc cttccttgaa gacccttcct 1920 ctcagatctg cgagcaggaa gcatgtatat cccttgtgat ccagctaaaa tgccatttct 1980 tccaggatca agtccagaac ctcacactga aacccaagcc ttgtgatgtt cttagtggtg 2040 acattettat teaeqtaqta aatattqaat qqtatttqtt qcacteaqat accatacaaq 2100 gtattgaaaa teteagacat tteeccatee agacagaagt ceatetttee tagttgtagt 2160 tgtctattct ccctttcccc tggctgcatg ttttaaattt cttacagtaa aggcatattg 2220 caacttaaaa gcaaaagtca ttttgagaca ttttcgcctg ttttttaata agtagatgag 2280 atattggagt gcatttgtag gctgagtgaa agacagacaa agtgaggaag gagtcacagt 2340 ttgggagcct ggtaaagaag gactcagcct atgagagcaa tgagttccca caggacaagg 2400 gtcagctctt ctcctacctt gactagaata aagggagggg ctgggaatgg ggctcagtag 2460 accatgggaa ggtgattcga tgctccctgt caggttcccc aggggtaaat gtcattttcc 2520 etgeacteca gggccagtte tgttecatte tgtteteetg ceagactett ttttttttt 2580 ttacagtttt ttttaattag gtattttctt catttacatt tcaaatgcta tcccaaaaga 2640 cccccatac cctcccccc attcccctac ccacccactc ccacttettg gccctggtgt 2700 tecettgtae tggggeatat aaagtttgea agaeetatgg geetetette ceaatgatgg 2760 ccgactaggt catcttctga aacatatgca gctagagaca cgagctctgg aggtactggt 2820 tagttcatat tgttgttcca cctatagggt tgcagacacc tttagctcct tgagtacttc 2880 ctctagctcc tccattgggg gccctgtgtt ccatccaata gctgactatg agcatccact 2940 tctgtgtttg ccaggcatcg catagcctca caagagacag ctgtatcagg gtcctttcag 3000 caaaatcttg ctggtgtatg caatggtgtc agcatttgga ggctgattat gggatggatc 3060 cccgggtatt cctgccagac tcttaagccc ggaccagagt tttacgtctt cctcatagtt 3120 gcttagtgag atggtgggcc ccaaataagc atgtgcatcc ccagcagcca ccccaatcct 3240 atgaacttgc atgctgggag ttgtggagtg tctcaggtag ccctgccatg cttccccaca 3300 gagetgetet teattteett aatgaceeet gtggaettte ataccattaa eetgeeagat 3360 gccaccactg aaaagcttgt attetteetg ggctactgtg gtccaaagca agacteceae 3420 agtgccatgt agcttaaggc tttcgctaaa agcagtgcta ggtgctgtgt ttcataccta 3480 ggcaccctac taaatacctg agaaactcca ggaggaagta gcttcaaagc ctagttctga 3540 gaatcagaaa ttgttcccat aatctctcct cttagtcact acaaggggca gagcctagct 3600 gttttatttc aggactgtcg gtgggacctc tgtagcaagg gagggatgga aggagctgct 3660 gttccatatc cctcaagtcc cagttttcca ctgaagacac cagccagcta gatggcttcc 3720 ctaaggtcac atcagaggag caacggaact cagttgtgaa gcagtgaagc ttgaggatga 3780 aaagcagaat ccaaaatgaa acattttcaa gatatgaaat gaggtgtttg tttcagtaag 3840

cagcagaaaa ggttatggtg tggagtgtct tttcaaggac aaggggcttt atgagctggc 3900 ttacaatgga cctgttcaaa ggaaggctgg ggtactaggt tcaccaggca gaaggtatct 3960 gtgatgtttc ctggatccag aattccccca cccccaccc ccactgctac ttcccacatt 4020 ctccttcttt ctccctcccc tcctccagtt tcctttctgt acagagagat gagtcccaaa 4080 catgagcctt taatggggga cttttgggat agcactggaa atgtaaacga ggaaaatacc 4140 taataaaaaa tatttaaaaa aaaaagatgc ctcctgccag tcttgaggac agtggaacac 4200 tttgaagatt atacctgctt gagtaccttt acccactgtt acgggaacac aattcctatc 4260 tectggecae agetagagtt teggeteect etageceaat ggtteteage etteetgatg 4320 ctgcaaccct ttgatacagt tcctcatgtt gaggtgaccc ccaaccataa aattatttca 4380 tagctacttc ataactataa ctttggtgct gttataaacc ctaatgttag caaccaacat 4440 acaggatgtc tgatataatc ccaaaggggt tgcaacccac agattgaaaa cccctgatct 4500 agatgctgta tgtggcaaag atttggtttc ctctgcttcc ttgtctttgg tttagaagct 4560 tacatagctg tcatcagatc aggatgggaa aggacctaat ctctcttgag actgaaggac 4620 aagccagtga gtgataagat tgtatagtta attccagctt cttctctatg cagactctac 4680 catgtgcaca aactgactta gaacccaaac aggctggcta acttggaacc agccaacctg 4740 tgttgctggg cttctaaggc actggtcctt tcccagccac tggtggtctt gacacagcaa 4800 gagcaagcct gtgagatgaa aggagctgct gctggtggga ggcagccttg ccacagtttc 4860 attetgeect getgtettte tettgttgte agteteatte tgteacetea ggeeteagtt 4920 gagagaggc ctaatgaagg aggaccccca accetgcccc ctgcttatat gaagccaccc 4980 catagtttct gactagttag tcacaggtca ttccataagg aatcagcttt ccttccatca 5040 agcaacetee tgecetttge tgteceegee tetecacete tgeceaagte atttteagae 5100 actttgttct tgacaccttt tactgtcctt ttggccagga tggctgggat ggccaggacg 5160 gccatgttgg ctgggatagc catgttgacc agactagcct tgccttcata gctttaagaa 5220 gcagcagcaa tctgctgccc ccaggcacca ccaccactcc agacagcctg cttttgttcc 5280 agtcaggaaa gtgcttcttt ctgccttcca ggctttttga actaaaagtt ctgtatgagg 5340 aagcccagag gttcagaact catttcacat ctagttattt aaaatttaaa attagctcta 5400 ttagtagttt tttgaaccaa atatgtctca atgagttaat atttttcaga gaataatttt 5460 taaaaagttc atggaatagg acggaggtcc aaaggtttct tcacgccttt atatctataa 5520 attgtagaaa tgaggtataa ttgtagaaat atatttgagg tatattttga ttctcatcat 5580 gtgtgtgtgt gtgtgtgtgc gcgcacacac acatccacat gaatccacta tatatata 5700 tattttttt actctgaacc ttcaggtatg gacctaagag tttgcatgat tcttgagtat 5760 ttcccacctg attgcccagc ttcccctggt gtgtcaaagt gatgctcaaa ggctgtgtac 5820 ctgaggctgg gaccagcagc actgagtagg tcaggagggg atacctcctt agataatggg 5880 tttctcagcc atgtgtcttc agtctgtgga gagactgtgc ttaagctgac attctgaaca 5940 gtggcacccc acagtatgtg ctagaatcct gtgtagagtt cagtgtggcc tgaatcctgt 6000 ggttatgcaa aggaggcagg acacgatete etcaggggta etgtecatgt gtteeeteet 6060 ccttttttt ttctaccttt tccatgaaaa gccctttgtc ttctgccact ggctctggtt 6120 atggacttgg tgttgatgtg agtacagttt tcagattgga aattaatgag gtgttccatt 6180 gagagaagcc tgacttctac cctggctggc tgctcccagg tttcctccat gtgggtcttt 6240 gctgctttct ctgtgggcag ctgcccttgg ctggcattct tctattggct ttccccagag 6300 gtactttcaa gactgctttc ccaggctaga aactattcta gtacatgtca gctgtgcctc 6360 ccacaagtcc caagccatgg taaagccaga cagccttggc tgagaaggga agttcgaaaa 6420 ggctctcctt tgtatgtttg tgaagaaggg atgaagggca aaagaggaag ggaaatcagg 6480 taaagatgct atggaaacca gcacctaaag tagaaagttt ggtagtgtcc atgtgggcat 6540 tggagaaagg ctgtcttgac aagaaggaaa caaagaagca gaggtaccta ttaggtagaa 6600 caggtgcttc taataagata gtgtactatt agtaggcatg tagccaggct ctggtgagga 6660 atagtaggca acatagggtg acacatggct gctagtcagg gctcaacaat cagaggggac 6720 taaggaagca actgatgtgt agagccaaga catgtgggca tgtaggcaga agaacatcta 6780 agagetttgt acagettaet gtaaaggttt gtgeataaaa ettagaatge tetgageaet 6840 catcagattc tacagctgtt cttgctccaa ctttgtacag cagaaatctg ctaattgtgt 6900 agtagttacc ttcacttgag tgtcatgtac taggaaggag gatgcaggcc acaggaggac 6960 agatatcaag acctgagtgt ggggaggagt tcatgagcta gctcactggg aggtgtagga 7020 atgaaaaggg tggcacacaa tgtaagctgc caccatctgt cagcaggctg aaaacagact 7080 gcctaacaca catgtacaca ggactgagct gagggagaac tcatttggga agaaaattaa 7140 gaaaagaaag aagcatagtg tccacacttc agtcttcatt tttcttgagt ttcatgtgtt 7200 taggaaattg tatcttatat cttgggtatc ctaggttttg ggctaatatc cacttatcag 7260 tgagtacata ttgtgtgagt tcctttgtga atgtgttacc tcactcagga tgatgccctc 7320 caggtccatc catttggcta ggaatttcat aaattcattc tttttaatag ctgagtagta 7380 ctccattgtg tagatgtacc acattttctg tatccattcc tctgttgagg ggcatctggg 7440 ttctttccag cttctggcta ttataaataa ggctgctatg aacatagtgg agcatgtgtc 7500 cttcttacca gttggggcat cttctggata tatgcccagg agaggtattg ctggatcctc 7560 cggtagtact atgtccaatt ttctgaggaa ccgccagacg gatttccaga gtggttgtac 7620 aageetgeaa teecaceaae aatggaggag tgtteetatt tetecacate caegeeagea 7680 tctgctgtca cctgaatttt tgatcttaga cattctgact agtgtgaggt ggaatctcag 7740 ggttgttttg atttgcattt ccctgatgat taaggatgtt gaacattttt tcaggtgctt 7800 ctctgccatt cggtattcct caggtgagaa ttctttgttc agttctgagc cccattttt 7860 aatggggtta tttgattttc tgaagtccac cttcttgagt tctttatata tgttggatat 7920 tagtcctcta tctaatttag gataggtaaa gatcctttcc caatctgttg gtggtctctt 7980 tgtcttattg acggtgtctt ttgccttgca gaaactttgg agtttcatta ggtcccattt 8040 gtcaattctc gatcttacag cacaagccat tgctgttctg ttcaggaatt tttcccctgt 8100 gcccatatct tcaaggcttt tccccacttt ctcctctata agtttcagtg tctctggttt 8160 tatgtgaagt tctttgatcc atttagattt gacctagtgt ggacactatg cccctcctta 8220 gaagtgggaa caaaacaccc ttggaaggag ttacagagac aaagtttgga gctgagatga 8280 aaggatggac catgtagaga ctgccttatc cagggatcca ccccataatc agcatccaaa 8340 cgctgacacc attgcatacg ctagcaagat tttatcgaaa ggacccagat gtagctgtct 8400 cttgtgagac tatgccgggg cctagcaaac acagaagtgg atgcccacag tcagctaatg 8460 gatggatcac agggctccca atggaggagc tagagaaagt acccaaggag ctaaagggat 8520 ctgcaaccct ataggtggat caacattatg aactaaccag taccccggag ctcttgactc 8580 tagctgcata tgtatcaaaa gatggcctag tcggccatca ctggaaagag aggcccattg 8640 gacacacaaa ctttatatgc cccagaacag gggaacgcca gggccaaaaa gggggagtgg 8700 gcgggtaggg gagtggggt gggtgggtat gggggacttt tggtatagca ttggaaatgt 8760 tacgtctcta gagaaaactt ttttttttt tttttttt tttttttt tttttggtttt tcaagacagg 8880 gtttctctgt gtatagtcct ggctgtcctg gaactcactc tgtagaccag gccggcctat 8940 gcctcccaac tgctgggatt aaaggcatgc gtcaccactg cccggccagg ggaaactttg 9000 agaccacaag aatgaagagg tcagagccat tttccttatg aaggaggctg aggctccatt 9060 caggaattgt gggtatgctc ggatctcaag cctggtcact tggatggctt cttgtagaga 9120 cctttagctg catctgtctc caaactgctt cccaacccct ggaacgggct ctgaagctgt 9180 ccttgcctat agcatgcaag gccttgtgag taccaggtat gaggcctgat tgctagagaa 9240 gacaggatct catagagtct cttgctattt gcaataggga tcattcttgg aataatccga 9300 aaagtagagt ttaagaaatt ttgaagaaaa aaaaatctaa tattacagat tccagacttg 9360 gaagaaaagt gaacagtagg gattggagag atggttcagt ggttaagagc actgactgct 9840 cttctggagg tcctgagttg aattcccagc aaccacatga tagctcacaa ccacttgtaa 9900 tgggatccga tgccctcttc tggtgtgtct gaagacagct atagtgtact tgtattaata 9960 aaaataaata aatcttttt aaaatttttt ttaaaataat gtgaacagta actgctgttc 10020 tccaagtgcc cctgttgtca tttttaaaaa gccatagttc tttctttcat ggagggtgat 10080 caatcacaag ggtcactgca tacatctagg atagaagctg tgttacatag attcggtgtg 10140 tggagagttg ctgagttcct ctctttcctt ctttctcaaa ggtatcagcc aggcgtcata 10200 gtcccatctc gtgtctcagg cagctatcct atcttctctt ccctctttgt gacattgatg 10260 accattcatc caaacaaatg gaaacacttc ccatgggcca ttcagtgcaa gtcttccacg 10320 tggccttgct ttgtgctggg gaagagtgta gacctcagct gtctcttgaa ttctgctagg 10380 gcctggtagt ctaaactgcc agaaggcagc aacctctgca ttttgttcat ccatgtggca 10440 ccagtcagtg ttgagagaga gagagagag agagagagag attaagtaca gtctgtcttt 10500 gcagatcctt gaagagtggt ttggccgcac tatcatccgt tcttgcacca aactgagcta 10560 cgaccatgcc cagagcatga tcgaaaatcc aactgagaag atccctgagg aagagcttcc 10620 cccaatttct ccagagcaca gcgtcgagga ggtgcaccag gcagtcctga acctgcacag 10680 cattgcaaag caactccgcc gccagcgctt tgtagatggc gcactccgtt tagatcaggt 10740 cagtgagtct cttttgtttt atgtggtctt gagtttggct tgtgcccaaa actcaagggt 10800 gagaaatatc ctggtggcct ctttctctcc acctatttcc cctgcccctg ccacaccatg 10860 gtaatatgag ttagggtaag atggtatctg tgtacagagt tctgtgactc ccagctgctc 10920 ttacctggaa aacctgtgtc catgattgaa ttctcacttg tagatggcat tgctgtgaca 10980 ggtccctggg acaaagaagg gaggaaggac atatttttgg cttgtggttt cagaggctct 11040 tggaacatag ctctgttgtt tctggcccat agttgggggc ggggggtggc atgtgagaag 11100 tatgtggccc agtggagctg cttgtctcat ggcagccagt aagcagagag acagaggcat 11160 gtgaaggagc agaggcaaga tagactttcc agggtacacc cccagtgata tcaatgaatc 11220 caacagctgg ttctttgaga agataagcaa gattgacaga cccttggtcc aagtagccaa 11280 aagaaataaa gaaggcccac attaacagag tcagaaatga acagggaaac attacaacag 11340 atgcctaaga aattcagagt ttcataaggg catactttaa aaaactgtac tctattagaa 11400 atggatgagt ttctagattc agccaaacca ccaaaattaa accaaaaga agtcaacaac 11460 cttccagcta caaagaaaaa tctagggcca gatggattca caggaaaatt ttaccagatg 11580 ttcaaagaag atctgcaccg agttgtcctt aaactattca aaaagtagag gcagagggag 11640 cacteceagg teteetetgt gaageettta tgteaceagt teteteeget eatggagatt 11700 acttectetg etecttgett catgettggt gteetgagge tgeageeeae eateetgtea 11760 tctccaccaa cagtccctcc ctgattccaa gaggctaagt tgatgctaat gacaccagaa 11820 cttgtgtctg acctttctcc ctcactcaag cctagcttct ttacctgcct tatctgcctg 11880 actgcccttc agcagcacag tggtgctcac tcacccttcc ttctgcagaa agcagtgctt 11940 gatgcccaca gcatggcaca caggcttccc agcatcctct tctcccactg atacactgga 12000 gcattatata tgtgccccca acccaagtgt accagtcgca cagatttttg taattatgct 12060 tagactaaac attagacaga cagatcatat acaactctca aaaggaagct gtttattctg 12120 taaacacatc catgttttag aaagacaagt cttcagaatg tctttaggaa gactgaagtc 12180 actttacaaa tgaaccgtgg ggcttaggaa agtctttaga aaatgaattg ggtttagttt 12240 tctcaaaaag actaggaatc tatgatgttg gcacctataa tctcatctct caggaagcca 12300 aaacaggaag attgaaagtt caaggccata taagatgtat gtcaagatca tgtggcaagg 12360 aagaataaga ggaggaagca gaggaggagg aagaggaaga ggaggaagag gaggaagagg 12420 aggaggaaga ggaaggagga ggaggaagga aggtggagag aaaggcaata aaaagaataa 12480 atttagtttt ctctcactct gtagctcagg ttgaacttga actcatggct agccccctgc 12540 ctcagcttcc caaatggtag gattataggt gtgagccacc aaaccagata ctaacttgta 12600 ttctttaagt cttacttttt ttcaaaaatg gtttagaaac atatatctat gtaaattaag 12660 ttataataca aaatgttagg ttgtatatta tgtatgcctt ttctgcatga ttctcttatt 12720 tacttaactt ttacaatgaa aaaccagctg ttacccaagc ccatcaaatg aggaagtttc 12780 tgaagtacca tttccagatg tttccccact aagatgctat aataaaattc aactggatta 12840 attcatctgt gaaactggag ggaggggag aaaatagcgg caacttatct ctgtcccatt 12900 ggaagaggtg tggtcatcat cgtaatgacc atagattatt gatggagaat gagcagttag 12960 tatgtctgat actcagaatt gtattactga aaagacttta gatatctgta tcccagtggg 13020 cctcctaact cataaatgag aaggctgagg tccccacagg tagatgggtt gcttattgcc 13080 aggcatccaa gtagctcttt gtttggtttt cctccattta ttacactatg ctgacataag 13140 agaaaaaagt ttgcctttaa agtgaaaggg gaaaacaccc tcaaaaacct aattaggttc 13200 cagttaatta aggtttgaaa gtaatgaatt tgtatccttg gagttgatcc cttcattcgc 13260 cagaaaacaa gtctgtagac ccccacataa gatggagaca tcaatctttg cagccaagga 13320 cactggtgag gccgtttata aatcagctaa atggctttat tcagaagccc tgcgtttgtt 13380 ctcccgtccc tgttgccttc tttgccctca caagttcatt tttccttggt gccttttcag 13440 tggcctgctg tttgccattg ttctctgaag ctttgtctgc catagttcac tgtgtccatg 13500 ttttgggtgg tagtccttta aaaagcacat ccttttatgt cagcagcaat tagagatcgg 13560 tetteageca atccagagge tttgeettte caagaaatea gtgtttgatg accetgagaa 13620 tgagcaagga tgaagtccga ggcactaata tggtgcttgt ttgcagagtc agagacacag 13680 gctcgataag tgcagaatgg cagagcaacg tgctcaccga gagctgattt taacaaagtt 13740 ttcttccaaa aggtgattct cctttgcccc aaaagcaaca caggcttcca aggctatcta 13800 gtgatttttg gtcgctgagt tgaatgatga cccttctgag tggcttgtct ctgaatccat 13860 gttttcagct accagggtag ttcaaggact tggtacagat gaccacttta attatttgtt 13920 tataatatat gtctctcccg aatcttaaaa gaggccataa tggggccaag acttctgtat 13980 ctgtagaaga aaaggaatca cagtggttcc taatatccat atactgagtt tgatgcaagg 14040 ggagccatct gagggttttt gctcctgact agcacaggcc agccctcagc agctgccatc 14100 taggggggaa gatagatctg cctggcatgg gtgtatttaa aaccctgaaa cccttttggg 14160 gttctaggtc agctattgcc ttcagaaagg atatgatggt aaggtaatgg ggtgccaaac 14220 agatecteaa tataagaeta acattggetg atgteaggaa acteeaegee etgetttetg 14280 aagctctctg aacctgtttc tcttcagcca ggctaagact tctatgtgaa acaaactaga 14340 agtttgcaga gatcagacaa gttctcccag caggcagtta aaactatgaa ttcggagggc 14400 cttggaagtc aaatgaaaaa aacctgagaa aaattcatat aaagtaaagg aggctttact 14460 aagttctcag ctctgtcatc tctgaaacct acttgacaca gttttgaggc ccaagctcca 14520 tgcagtttct ttgtaaaggt agcctttcta atggaagaca cttttgaata ccctgggact 14580 caagetgtgt gagtetgtaa tgtttgatee taacetagea tageetttea ateagtgttg 14640 gcaggettte ccaggaaagg ccagacagta aatgacatga geteetggte catatggtet 14700 gtctctgact cagccctgcc tgttaatgtg ctccaaatga atgggggtag ttgaaggtca 14760 ctaagacttg gatttgatat cattttcaca gaccacaaaa tattattctt catttgatta 14820 tttttcaagt atttaaaaat gtaaaaattc ttctttgctc cccggccatg caaagcaagt 14880 taaactgtgt cccacacatc actgaccctg cttaactgac caacaagctt ttcagcccta 14940 ttacccgcca agccttgagc agctcattac cacttcccca ggaagccagg ctaggaaatg 15000 gagaacagtt gggctaagtg acttctcagg atggttccat acaattaagt aaattattct 15060 tttgattagt accacgctta gggggccagt tggaggctgg aagtaagagt gactgacccc 15120 ccaaccccag cacagttctt ttgcccttcc caaggtccag tccctttagc ttgaagccaa 15180 agagtcagca ctctctttac tcctctgcag gaccctcagg gtcagagcag ccctccctct 15240 cccctcccct agetccccct teteettecc teccetggte etetgaaggt agagactact 15300 ccaggaagag caggctatga ggaaggtggg tagcttctct cctggctacc tgtctgcagt 15360 gctaattaca gcagagtgtt ccttctctct gccatagata gctgcattct ggatggctgc 15420 tgctcagtgt tgctctccga tgacattggt gtagctgtgg agaatgggca agcccttctg 15480 gtttccttta gctttagtgt ctgtgtcaac tcaaagtaca acatagtcca aggcccaggc 15540 tctgaggttt ttcattcaga gagttcttca ctcagcatag cttcagagac ctgtttgggg 15600 agcccagtgt gtgtggaggg ggtgagaatg taaatgagga atgagaagtt tcaggtatgg 15660 gaagggaggc agtgaaccac tagacagtaa gaagcactgg gtggaagtgc ttgctgaact 15720 tgaaactgag gaatgactcc tgcccaaaac cagtgctcat ccttagaacc ctgaagaaat 15780 ccatgtgcct gaagcatact gtcttagtta gggttttact gctgtgaaca gacaccatga 15840 ccaaggcaag tcttataaaa aacaacattt aattggggct ggcttacagg ttcagaggtt 15900 cagtccatta tcatcaaggt gggagcatgg cagtatccag gcaggcatgg cccaggaggc 15960 actgagagtt ctatgtcttc atccaaaggc tgctagtgga aaactgactt ccaggcaact 16020 agggtgagga tcttatactc acacccacag tgacacaccc attccaacca ggtcatacct 16080 attccaacaa ggccacacct tcagatggtg ccactccctg gtccaaggat atacaaacca 16140 tcacacatac caagagettt etgteetete tgatetteag aggacateat ttgtaactee 16200 tgtctctttg tgcctttcac ttcctgtaat atgtcacagg agtcatttgt gttgaccgaa 16260 cacacacaca cacacataca cacacacaca gtagctctgc gactctttag ggtagtgaca 16380 gtggttcagt gggcttctgc tacttccagg cettccattt aaatgtagac agcacatggc 16440 ttcacttgga tatttagcaa ctcacttatt tctctacttt cctgcttatt ttcatttgta 16500 gatccagctc tctgtgacac tcagacctgg actctcaggg gtagcaggaa gggtggggag 16560 ctgcaccctt caccacagag aatcagaaca cagcctacag tggggtctgg aaacctttcc 16620 tttgagagtg acagatcagt ttagttactg tacattaatt tcatatggaa ttacagaaaa 16680 tagtcatact tatgcacaca tccttccttg ttagatgaat ttctctgggt ggcttgttag 16740 taccatctgc gctctcccta tactcactct ccctgtgaca caacatagag ccatttctcc 16800 cacttccaaa aacttcagaa aatcctgttt accttggaag ttgttatgaa tgcagactga 16860 caettgacca gtggccattg ctaggtgcct cttgagttct ctctccaaca gcaggaacac 16920 tgctcctaac actgctccta cagcagtggg aagcagatgt cctaccctaa gactgcatac 16980 caagtagagg agaacatatg gacttagcaa aggaggccga ggggatctca agcacgatgg 17040 ggagtggatg ggagtgaagg gcaaggacaa cctgctcaag acagctgtgc ccactgatga 17100 gcatgagaag agccagaggc agcttctcct cctctgagct gaggctgaga ctggacactt 17160 gtgacacacg gaggtgaaag tggctctgtc taccccgaga tggtttagat gaaaggaggc 17220 aaaaaagtag ccagagatag agccacaccc tctgccagct ggaacacttg ggatgcttcc 17280 ccactcctcc acctctgcta ttaccttgac tgttgggtgt ctttccaggc aggatgtagt 17340 gaggcctgaa gctggaactg ctgcagttgg tcaacaggcc tgttcagaag aacactgagt 17400 ctgctttcta agtaactcta gaaagcaagt ttggctccta gcccacctct agaagctttt 17460 gettgeette tggtteacte tgeatgttga tgtetageet catttettee aggeeaaaaa 17520 aaaaagcatt getteatgee tgetgetata ttetetgggt teacetetet etggaeetga 17580 agaatctgaa tactgaaatc ctctgcttgt tccaagtggg gctggctcgg ccaaccctct 17640 ctctcagggt gccatagccc ttcatgccta tctttgtcac actgtccagt tgtcttgtta 17700 ccccctctct acccctgtct cctcccctaa gattcagttc ctacagagca aagaccacat 17760 gctattgatc tttctatcct cacttcctga acagtgctgc attttaacaa gctgtttgtt 17820 cagggtetet aaacagtgee atgeatgetg gtetttttaa ataaggtaet getagetaea 17880 gtggggagaa tggaaaccaa ggctgtagat cagaatgttt gcatgagaga gttactatac 17940 agtgtgaacc aaggctgccc aagtaaactg gctgttactt aattctttgc cagggcatcc 18000 agcatgtaga agagatgtgg tgaggacttt ctcaggtgga gctgtcctga taggcatgag 18060 gagtcagaag gcttcagtat gcttggggtc atcgacactt cagaggttcc ccctcagatt 18120 gggatgtccc tgctggggat gtcaggaagg acactcccaa agttccacca gagaagagag 18180 atgctggtct aaaaaggcaa aaattacctc ctcccagagc tactcctctt acctctggaa 18240 tggggcagaa acaagttgga taggaatggc aacctctagt ctttgcagga tcctgagagg 18300 actocaccc tacccccacc toogttttgc toagaatgga aatggcggct accagataaa 18360 gactttctat tggtctttgg ggctttttaa gaagagaact taaatacaac ccaggttact 18420 caaacagaag ttgctgacct tcccagggta cagtggaggg gaggaagggc tctcatgctg 18480 accagaagag acaagaactt ctgtgactta aacagggcat ggctagaacc ctcatttcct 18540 cagagatgag attattttgt cttatgacct tgacagatgg aatggaattt ggcccttctg 18600 ggactttgcc ttttgggtaa ttgtactcag ttaggcaacc ctgggactct ctttattcat 18660 aggacatact gcatattett gecetgeece catgteacae teaegteaat tgaatgtaag 18720 ccagacagct acataagaag catggaatgc tttgacgttg gtaaaacctg cattggagaa 18780 agagaaccct tgcagctgat ccttagattt caaccatgac tgcttcttgg gactggccca 18840 gttgatttca gtttgtattc ttcagtgcgc tcgggactct gtttcctagg ccaaagctct 18900 tetgttetgt teattetaca etgageteet geaaatgtte eettgteeet caagaacetg 18960

ccacacaagg atatattaaa aaaaaaagtt agggtagtgg tggcccacgc ctttaattcc 19080 agcacttggg aggcagaggc aggtggattt ctcagtttga ggccagcctg gtctacagag 19140 tgagttccag gacagcccag gttataaaga gaaaccttgt ctcagaaaaa aaaaaattac 19200 taagctaggg ctatatagct tagctgttaa gtgcttaccc aacaacatga gaccttgggt 19260 tcaatctgct gcacaacata aactgtgtag tggccacaca cctgaaatcc cagcactcat 19320 gaagtagaat caggagaatc agaagttcaa agccagtttc aaatacagag aatctgagtc 19380 cagcttggag tgcataaaac cctgtctggg aaagaaaaaa aaaaaaaaa aaaagcagtg 19440 ttcccgtaca catgaagcat tctatcccca agacaaagga aatacacgat gtgacaatat 19500 gaagtaggtt totaatacat ttttagttat ttggggagtg tgaagatatg catcacagca 19560 cacaaatgac gatcatagga cagcttacag cagtcagctt tcttcttata ccacatgggt 19620 ccgaagatgg aactccagtt gtcagacttg gccgcaggcg agtttatcca ctgagcctct 19680 ctccggccat gaagcagtta ctttacgttg actcgcttga gcttgttggg agcatgctta 19740 attattgctt tgctcacttt ggttgcctca gagtagcttg cgagaattac tagactcaca 19800 cgttagaccc agatgtcttc tgccttctga tgaggagcaa gcgtgtgagt aaggagggga 19860 agcaggtcac agtccaagcc gctcaagtct gagctgcaaa tccttcattg tacagacggc 19920 tccgaatcag aacacttcct gttgctacag tcaggacggt tatagttttt attgttataa 19980 atgacattgt aattaatacc cttacacaga aagtgtaaaa gtcacttaga aatacaaaca 20040 tcataaacta ctaggttgaa gaaaattgac tttttctgtg tcaattctta agattaactt 20100 tgattatttt attgtaaaat gaatatatgt tcatactgta aacatattta aataaacaag 20160 gaaaaagtag ccattggcta tgcctcacct agtaataata cttaatactg ttcacttcag 20220 agcttttggc tttctgggtg ttttccagaa ggttggacta attgaggttt accccatcag 20280 agaacagtgc tatgctgtta ctcttctcag caaattcagt ttgtggcttt gctttaatct 20340 ttgttagtgt aagtaacttg gaagtggtgt tccattgttt gagttgcctt ttttcctcct 20400 gtgtctctat caactctcag gcctgtcttt gccaggtctg tggaaagcag atgctacatc 20460 ccatccctag gactgccaac agcatcagca caggcccctg ctctgatcaa atacaaccac 20520 ctttttccct atgaagatag aattatatac aataaagtcc accatcttta gtgtataggt 20580 ccacaagctc cacacataat catatgtcta ccatggtcaa aatacagaat agttgcctca 20640 cccaataagc tccacatgtg cccttcggta ggcagactgt ctcacttatc ctcagtccct 20700 agtaagccac acatgagcac atgcatacag ggtacaaagg tcaatttaag gtaccattct 20760 tcaggtgccc tctaccttgt ttgttgaaac cggatctttt actgagaccc agagtcacca 20820 attggctcgc ctatctaaca gtaagctcca agtatcgtcc tgtctcctcc tccccagcac 20880 tgggattaca agcatgtgcc accatgcctg gcttttaatg tgggttctgg agaccaaact 20940 tagatectea tgettgeatg gaaacatgtt ccaactgage tateteceta ttetaatttt 21000 tgcccatttc ttaggtgggt cttttggttt cctagtacta agttttgagg attcttttgc 21060 tattttaaat agaacctcta ccaagttgtg tgatactaca agccatccag ctcattcttt 21120 catcccttgt cttattcttt ctggctcttc tttattccct ttcttttgaa aagaagtttt 21180 taattttgaa gcagtccagt ttaccaattg tgtccttatg ttatcaaatc taagattttt 21240. gttttgttcg ttttgatggt attattattt attattatta ttatttaatg tatgtgagtg 21300 ctctatctgc atgtatacct gcatgccaga agaaggcatc agaactcatc atagatggtt 21360 gtaagccacc acgtgattgc tgggaattga atgagggacc actagaagag cagacagtgc 21420 tettaaetge tgagecatet etetagteet atteattttt ttttaaaeag tettgetatg 21480 tageteagae tggececaaa eteaagatee teetgaetea getteecaag tgetgagatt 21540 acaggettgt teetetaact eetggeatga gaaatettta aetgaeetag aateacagat 21600 tttcttctag aagtcttata gcttcagaat ttatttctac tttctctctt cctttataaa 21660 cacattecta ggeecagaca tttettttgg aaaaaagtte caataacaga aetggaeaca 21720 cctgagcaga tgtagggtag agtcagacct gggagtcttg ccaggcacag taccctcctg 21780 gagccatctg caaagaagtt acctcaggag tggcttgtaa gcagatcttc tctggtttta 21840 aagacttggc ataaaactga aaagtgtatc ttttgaatca gggagcagaa cgataagaga 21900 gaaatctctc agctctctag acaaatcctc ttgactatca cagagctgat ggtgagcgga 21960 gccaagcaag actttgtcga ttacatgcaa acgcccaagt cagtgactca ctcaatcatg 22020 ctttaatctc ataactcagt ggctttaaaa attacagtca acaaggcagc tcgtgggtta 22080 caactgccat tggaactagg ttttctctga acagctggag tgtaatgtgg tgggaagaaa 22140 gcctgctgtg ggtgagaggc caaagactgt ttgcctggga aggatgtgca actaacgttt 22200 gataaaaatc tgtgaaatga ccaccctcag ccaatctaag tagaggcctg ccattttcat 22260 ccatgggaaa gtgcatcaca gcaaaagcat tcagaaggca ctggtaagac agtggcagtc 22320 accattcatc agacaagaca gccctgactt caggaagtgt caggagtcag agtatgagta 22380 tggaatatta acagagcagg cagaagattc caattctagt caaggagggc cagtgagaga 22440 gaacagtttg ggaatggctt ctctgaacag atccaggcag atcagtgcag tcatttgcta 22500 tgttctaaaa tgtgtaggcc tctgccatag ctgtgtcacg gaggatatat aaacaggctg 22560 ttctttgagg acctcattgg gctgtcccca ggcacaaaca ttttcttaat ttcaatgtag 22620 aagctgttac ccacaggaga gatggagtag gactttggtt tcagagccct atctatagca 22680 gctttgttga gacctaactg gaaaggctca agataggaca tcacacaagg catttagaag 22740 cttgtagcag tcatcagaca tcagaccaga cctgacagga agaaacaggt gagtctcaag 22800 agggttcatc aggatgctca cgagtttctg cctgcacagc atgggcatat ggtattacca 22860 ggagaagcca tctatctgcc cataggggac aagcagacat cagttgggtg atagggacat 22920 gaaaactttc tggcccatct ttatatctgt tccagtgaaa gatgtgtgag gtcctcaccc 22980 ctgaaggctc tatacttccc tctcctgcta gacagtctag cgagactagg aagcaacaca 23040 cgttacaaga gtacaccccc cgccccgca atgagcccag ttgttcacta tggggccggg 23160 aacatcaccc agcaggccct attggtcctg gcctgctccc ctccctcctt acctcctcac 23220 tcactcttcc cagctcgatc tttctcgctt gttagagaga gaaaaaaagt gaattcactc 23280 ccagtccttt tgaaacccaa tgtgtcagtg atcgatgagg ctgtattctc taacttcaaa 23340 ggagaaaaac taagtagagt gaatactggc caggggagtt gaaaagtccc agggagtagg 23400 agacacagga gtgaccctgc catcatgagg agcacccccc atcccacccc tgctggtgcc 23460 atgcagaagc acagacaatg ccactttcag taaatcatga cggatcctga atgcccagtt 23520 ttgtcctgtt ttcaatgggc tgtgggcata ttgcttaaga tatagcaagc catttgtgct 23580 gggttcccag ctactcaaag gctcgacatt tgagtgttct ctcaattgta taatagagcc 23640 tttgcatatg tgatttgggg ggagggtttt ttcctccaga tttccatagc taatcatagt 23700 agaggtgacc tcaagtgtag tgcagaccat tgtccctctt cacccctgca gatcttagca 23760 gtgctgagct ttagggatat tcaggcagca cctaattcaa tcacacatct gacccctgcc 23820 tetttggcca eteetetgag eteagtaget ecetggggte teceaececa caageetgga 23880 tcctcaagag cctttgtact gagtagaaag tgctcagacc ttcctccacc ctatccagat 23940 tcccactccc cccgcctgaa tttaagcaca gagaatccag tgctgcaggg ccacttgttc 24000 tcacaaggct gcacttgtgg agatgcctgt gtgaagcacc ctgtagacat cccatgctaa 24060 agtcttggga acacagagaa agaaaaccct ggggtcattt aagggctggt gtggtcattt 24120 acttaatcat ctgtgaccag caagggcctt gttttcagta aagctcggaa gcttccttgg 24180 ctctttatca atcataacaa acagctagaa tttattgaga gccttctctt tgccaagtgc 24240 ttctacttgc taactttaac ttcctccacc ctcaagccct ctacccattt ttacagatga 24300 ggaaactgat gctcaaggtt gaggagttgt caaagagtac acactggcca ggattacgga 24360 accatcttct gccactactg cctttctctt gttggatatg gacgctgtgg ttttatactc 24420 tacacagttt aaaaatggtc gaagttctca atttagggca actttgaaag gctaaagtgc 24480 tgtgtgagta tagtttttat aatgacaaaa ttccagaaga ggagactaag tgaatagttg 24540 tctcaggggc agtggcaact gtgaggatcc aaccatgtgt gcagagtggc cccaatatgg 24660 acacattgtg acaatttcct gagctataac catgtaagat gtaacctttg gtggtaattg 24720 agtgataggg acatgaaaac tttctggctt attattgttg tttgtttgtt tctattaatt 24780 ctcttaagta cctcagaaaa aaagtgctac ttaattccat tgtgtcaaga tgacccagtc 24840 tcagatcaag agccacattc tgcccaagca gttcacacca tgcaatttca ggacctagga 24900 gggaacagtg tctagcagag agaccagatt ttaatgccag tcagatgtaa gctgagactc 24960 tctttccctt tttatggaag tgttaaacta agggttggat gtttataccc caatctcagg 25020 gctgtagtta gggacccaga gcaagtttct caaattctgt aaccttttca gttcctagct 25080 gtcaggtagc tatgtgaact gtacccatct ctagaagcca gtaagagaat ccagtagaac 25140 ctgatggcct aaaattgatg tccaggtctt acagagtaaa gagagagagc tgacttcagc 25200 aaattgtcct ctgatatcta cacatgtgtg tacctgaaaa cacacatccc actaataaaa 25260 tatattaatg taaacaaaaa aattaaaact tttttaataa aagaagagga tctagcgaga 25320 acacatcctg ccaaaaaaca aaaaaaattt ttttttaagt tacaggtagt ggtgaactgc 25380 ctaaaatgag tgctgagaac taaacttggg tcctctggac aaacagcaaa ttctcttaac 25440 ccctgagcca tctctccagt cctagcctta ccacactcgt cacagaagat atgttgagct 25500 cactctagac gacttattgc tagcatgagt atctgtctag tcccatgtct aatcttcatg 25560 atgtaatcag acctacccag cagatagcaa ggcagcagta aatgctcttt tttatttttt 25620 ctggacttgg tcatttattt cttcactgtt attactttac tgaagatttg ggctggcact 25680 ggtgataaac tgataggtat acccaggtgg tctctgcctg tatttgtttc tcctctattg 25740 ctatgacaaa acgccatgac caagacaact taaaaaaaaa gaaagcattt aattgggctt 25800 atggtttcag ggggctccag tccctgacga tggagcaaag gcatagcatc agcaacaagt 25860 aagaattcac atcttgatcc ataagcacaa ggcagagagc acactgggaa tagcaccagt 25920 cttttgaaac ttcaaaacct gcctccagtg acatacccct tccaacaggc cacaccccaa 25980 tccttcccaa gccatttcac caaccattca aaatatattc acaatatatg agcctcatgg 26040 tgttctcatt acctgagacc actaaagggc ttcgtatttc ctatcacatg gaatcctccc 26100 atcatgtett ttataaetta gagtaggeet attecatgta gaeteeteta eeagateeat 26160 ctcggagctc cagcaatgca gtcatgtgac tgagcgtctc tgccagcctt tgctctgaac 26220 tgcacattct gcctccacag tgaccagagc tgcagacaat gtatacttag gtccatgccc 26280 taaacaatag atcctagaca cagaagtcct cagcccattt cttcagagaa gagcagtagc 26340 tcctatgtta atcttagtag cagtggtggt tgttgttttt tcttggttcc tgtcagtcag 26400 tattttgacc agctgactaa catttcttat ttcagccttt tgcatcctct gagagtaaga 26460 tcctcttggc ttcagttctg gtctctttac tgattttgag tacaactgag ccatgttagc 26520

tggaaggcag acattgaatg gaaaagtaga gctagcatgc ctgtctctct cactcattgt 26580 acccacctct gacagggtat gtaagggtac ccgtccctca acccagcctc agtcagccca 26640 tgactctgga tgggccagtg tggttagcca ttcatggggg ttgcatgtct taaataaaag 26700 ggcatggaag gaagcetett tgeetatgat eeteaacaag gtteacatet gaatgeeatt 26760 tgctgttctc tgtctgcttg aacctagaga aggagaggtt gtagcatggg gctcttacat 26820 gggagatagc aagtgggaaa tgcagacttt agagccaggc aggtttgcat ctatatgcca 26880 gttgaccaag tgctgatttg ccttatttta gccaaattac tatacctacc ctagcatcca 26940 tectgaacte etttaaatag tggcaatggt aactgggegt gtgaceetet tggcaacatt 27000 ccagctgcac aaggagcctg tgactcctgc ttctcctttt agggctttat ctgatcttgt 27060 ggggcttacc caaagttggg taagtccaaa gttgggactt ctgtattaga actaggatgg 27180 ttgggacaag ataatagctg agcagataca cagtggatat agtgaacaga actgtatact 27240 tgcatttgga ctgcctaagc cagtctagca ggttgttgtg gctgcttccc tgcccaatca 27300 ccaatagaca agtctactgg agccaaggtc tgactgggct tctacctggc aagacacatc 27360 tgccaaccca gcatggccgt cttaggttgt ttgtttgggg atttgaggaa ggggtgagag 27420 tttatttggc tatttgctta tttggttaat ttattagtat tcttgtttgg ttgattgttg 27480 ttgttgttgt ttttgaaaca aggttttact gtgtagccca ggctggcctc aaactctcct 27540 gcttcagtct ccagagtgcc agagttagat gcatgtaatc ccatcactag tggaagcctt 27600 acttttgaag agtgtagctc agttagaggt atgtaatgcc ataggctgaa gcagccctag 27660 agaccagtca ccaagggaga aggttggggc taccatgtga cagaggagct gtgtcagcct 27720 ggccacctgt gcagtggtgt aagtactaca agactccact gaaatctgag gcccaggtct 27780 gctgttatgt ttcccaggga ggcatgcaga gaaaaagtgg tttccctaat actgctcaag 27840 tttaaaacaa acaaacaaac aaacaaaaaa catggtggta cttgcctttc ataccagtac 27900 tcagacagca gaggtaggtg aatctctgta agttcaaagc tagcactatg ttcaaggcct 27960 gccagggctg catagtgaga ccctgtctaa aaaagaaaaa tgaaactgaa ccctgaagtt 28020 gtagaaactg ctcagatttc agtgagttct tttggactaa ctgaatgagc ttgttccagc 28080 gccttatttt ttctcatgtg gagctggcac atgagcaaga ctatccccag gctttgccac 28140 tacaggatca ccattgtgga taggtcatac tgttggtctg tgattttcct cacttaattt 28200 tcacaacaat ctcagaagtg ctgtcattat ctcctataat tcttcagagt cagaaaatga 28260 ggtacaaaga ggtaaaagaa ggaagatcac ctaactatta ggaagtaaaa ctgggatcca 28320 aagatgggtg accttttctt ctagtgtaat ttgccttctg acgttgtaag gccagggcac 28380 agcaaaggag acagaagcag aagtgtgagc ccttagaatg ctaaaaagaa aaagaaagtt 28440 agagtgggga aagatctaga ctagaacagt tagacttggt ctgtcttctg aattctagct 28500 ttggagcccc cgcaaagact gcatgttata tacagcatag agttaaaagg agcacaggtt 28560 tctgcttaag aaagaatgtg agcttacttc attaacattc aatagtatat atagcttctt 28620 tttatatttc acacttattt atcttgtgtg catgtatatg tgagtatata cacatgccaa 28680 ctgcacacat gtggagatca aagagcagtt tatggaaatc agttctctcc tcctaccatg 28740 taagaccctg ggatcaaagt cagatcatca ggcatcagca ggagccttct cgctggtctc 28800 catatgcagt ttcctaaaga acaaggttat ccaagggctc tctcaccaca ggtgatcaca 28860 gttacatcac agttagcaag gccagaagaa tgcaaagaat gtctttattt ccttcctgga 28920 gcctggctcc tgccctccta aacttcttaa attttgttta atatttacat ctcttctaag 28980 atgtaagtac ttgtgatgtc tttaaatttc acaacaccca tgtgttccct ggtttacact 29040 acaagtaggg cagcatctct taaataatgt tgttctagaa ggaagagagc tcagatacaa 29100 gtagcaacct ggataggaat agcaattcca gctattggat actcactgga tatagttcta 29160 aacagtctaa tcagcagttg tgtgatcagt gggcacttag ggctgaatgg tagaagagta 29220 gctctcatgc caggaaatgc accaaactca ccagagcaag cacagacaat ggaggagaga 29280 caggtggctt gccccaagac cccccaggag cctaagatgg caatattgtc gttttgaata 29340 gaactctgac aactgctcta tcttatataa gatctcctta cataaggatg cagagagac 29460 atcctcatta aaacacctca aggggttcat actgattttc tagaagcaga gcttctctcc 29520 caacaaatac atcaggactg gctatagaca cttttttctt caataggcta aaaagatccc 29580 acattectee aggagacaaa eeteagaaca geeacagagg aactgggete catggtatag 29640 gtggggcatc taaggtccca gagcccacct ccatccagac tcagggagag aacaggcaag 29700 ccaaatctgc tggctctcaa tttggtttac ataactcctg actcctcaag tccctggaaa 29760 ctgaggccaa ttccctggaa gatcattctg ttctctcctg ttttttcaag aagagagcca 29820 gcctgatcac tggctccgaa gactgtgtga gagtgtccca cttccttctt ccacgaactg 29880 agtgtctgcc gtcatggctg ttgtttagga aggttctgtt tgaactctca taactccata 29940 aaaagaaaat ggaggacttg cagcaaagga aataagtaag gtgaatacat taggagaagt 30060 gagagactgg gaagggaggc agacagaagg tgagctccca gtatctgtgt gcagagtagg 30120 caccagactc tctactgcag tatcgcaaca gcagaagcaa tcctacctca gagagttgag 30180 ggggaaggta agaaggcaca ttttttttta aaataacaaa cttgactgaa agttgaaaga 30240 tgtgttccta gtactaagaa cagtttctca tgtgaggttg cctttagggg cactgcatac 30300

acttgtagca atgaaaaaag atgtttatag gctctgtctt aaggtaaact tggtgagaat 30360 ggagggtaac taaaacaact taaggaaggc catgagtctg gggagcacta gctcttttgg 30420 agceteagtg tgteetgggt aaagttggag cateettgtg gtggeagete gattggtgca 30480 ctaagtgcaa atgtgcacca agttctggac tcactcttct cggacacata gactgagtgt 30540 ggctcatatc tgtaatcaca gcactcaaga ggtggaagta gaaggatcag aagcacaaga 30600 tggaacaacc tcagctctat agacagttta aggctatcct gggctacctg agaccctgtc 30660 tataagcaaa tgactaaaca aacagacaac acacttaatt tttttatagc aaccactttg 30720 aagtgggagg ggtctgatag ggtctctatt gttcacagca agtgcacaag gtcaagagta 30780 gctaggcaga tgaagaagag gccaagacac ctgaacagta tctttcccat gggttcggag 30840 gagccacgtg ccaccttcac agtcagcatt gtctgtgcga gtagctctgg cagcatcagt 30900 gcccaaacaa cggctgatac gagtccccag atgcaagagg aaatagttgt ctgtaattgc 30960 ctgttttaag tagagtggtc aggaggctac agcctcctca tcgggctaca tgtggcatat 31020 gcaggcttgc tcatcagacc ttgtatttac tgttttcacc ttaatggaga atgggagagg 31080 caaacaaagc ccagggactt tgtggaagct gactagaagc ctctgggact ccagggactg 31140 ccaatctgct aaagaagaag ctaagaaaga aaatgagctc ctctgcatgg gtctccccat 31200 gatggaaaca gaaggccaca tggcacagtg taaatagagc cctgctgcac tgctcttact 31260 gtggtgaatg aagaagaggc aactagccag gagggcagga ccactactac tgttttgctg 31320 gctggttcct cccaagtgag cagccttccc tggggacaga ccttagctct aagacagacg 31380 tggcttcttc ggagcaagtc aaacctcaac atcqaaqaat ccttgtcttg tcagttttag 31440 ctttaacaag aatagaacaa gcttctggaa caggacacag tggagtcagg agaagcggcc 31500 ttaagtgaag acacagctgt ggggtttcca gactcgcact gcagggaggc gtcatccagt 31560 gggagcggcc agcctcgctg tagacttcca acactaacga atcgggaact ccatgctgaa 31620 caggatttag ttagagggtc cctgtgccag cagatggatg tatttttctt gaaagaccaa 31680 ggtgccagaa ctcttcatga ttacgttact ggagcaaggt ccttttttgt ggtttgtgaa 31740 gttgagcgtc aggactgcag gattctcttg ctctttctta ctcttatttt ttccaggtca 31800 gaaccagagc ttggagcagg gaggaaaatc ctgctgaatg agcaagttct ttcttaaaaa 31860 gctcttcaag tccaaaaaga cttcagtgga cttaggagaa agaaatttaa tacattgcca 31920 tagaatcgtt gttaaccaag ttaaagcaaa gcccacagca tctttgtctt ataaaagaaa 31980 gcaaagagga gatggaaaaa aagaaataat gcttaggaaa tccaaaccaa acaatgaaga 32040 ctaacgaagg aaaactaaag atcacttcaa agaatgtgaa gattccctcc taataagatt 32100 tttcaatttt caaacctaag cttcaggtgg gaggaccttt tcagtttttt ttttttcaa 32160 gtatgctgtt aagtggcatt ccccaaaatg ttggccctgt gtaggattgg ctgccttcca 32220 cataaggagc agtcagatac cctgcaagac ccaggaactg agggagcttt aaccatggga 32280 agctgagagg cttgccagac tgctccttga cctgagcttg aacctgagtc ctaactgcta 32340 gcaaactgaa acaagcccag cctccaggag aagaaagtgg gcggaactag agcagtccta 32400 gccagaaaac tatgctcctt tcaccactgg ctctgtcttt acatccctgg gagggaagcc 32460 tgggttgggc ttcaagatcg cctgctcaga ccatccctct cacttgctag ccccttccag 32520 gcccacgcag aggcactagt gcctatgaga ggtcagtttg catctgttgt ggacaagaca 32580 gggaattcct tgacattttt aatatttatt tatctttgtt agtgtgtatg tatacacaca 32640 cacacacaca cacacacaca tatatgcaca aatgtaccaa caaaaagtta tggagcttgt 32700 ggggggagtc agtttttttc ctttcaccat gaggattccc agaattgaac tcaggtcatc 32760 agactagaag caagcateet caccaactea geetteteac tatacettge atagagttte 32820 tttattatat gtaagcacac cagacacacc agaagagggc atcttatgtc attacagatg 32940 gttgtgagcc accatgtggt tgctgggatt tgaactcagg tcctttggaa gtgctcttaa 33000 ccactgagcc atctctccag ccccagactg gtagttttta aaagcaccag aagttctgag 33060 cttccatctt ccttactcag tgagtttaag aagcacctgc ctaggcatga tattctccag 33120 ggcaggccat ttgggcaggc cattctgtac atctgagcct gtgaaagact ggcttgttca 33180 ttgaccccaa gagacacctg gcgtgcacac tgaccaccct ttcctgtttc attctgtcac 33240 cttctgttgc ttattcttat gaacgcattt gaatccactg acttcactgg gctgggatcc 33300 aaagtaagge cacgtgeett ttacteatea tagaaaacaa etataggeet eetageetee 33360 tgcttagcct tggacattca ttctctccct agttttgctc acaacatggt agaatctgag 33420 acccaaaagg acgccttta tttcctcagc caactagtag tgtggttcct gggaggagac 33480 actgctggtc tcccttgcca ctatagtaaa acccaagagg tgcaacaacc cccgaagagc 33540 ttgcttccta ccttccccaa atccgtggga aagtttgcca tcctgtccca agggtttcag 33600 cetttattta acteageett agteetatgg ceagatgeet tgtteaceee tateatggag 33660 cctggacagt gaagggcccc atcagaagtt ttatgttctg ctgcccacag ctgctctcct 33720 gtgtggtctc agcctaagtt tctagaaata aaaagctctc tcactctcac acatgttcat 33780 tototototo tototototo tototototo tototototo tototototo tototototo 33840 teetteette etteetteet teetttette etteetetee teeetteeaa eteetteeet 33900 ccttcctttc ttttatttct ttttgtgaag cagagtctct ttatgtagac caggctggcc 33960 teggatteat aagagatetg cetgtetttg etteeegagt getggaatta aaggtgtgta 34020 caaccacact cagaactett ccatttetae etaaagaaga eetgtttgte etttgteaag 34080

ctgagagcct ttcgtctccc taggtccctt tcaaaacttt attcctgtgg caatggccta 34140 gaagccaatc cctttgagag gacccactag cagtcagtgc ttctgttcca tgtagcagct 34200 gccaccagag tggcttccat tcctgctggc tgacttccca ctgagggggg cctacagagc 34260 ttcgtatgtg ccccaggctg gcagagaggg cagcaaggaa ggctctgttc tggcaaggct 34320 tatggtatag gaagtatcta ggaaatactg ttgctcttca gggtgctgac aagataggag 34380 ctctttcttg cttcccgggg atttggaccc ctagtttcag tagagctggt ctttgttgac 34440 tgtctctgcc tggatgtcct ctgctgtagg tcttttgttc tgcttctctt gggaattctt 34500 ctgcttgctt tctggctgga ggtactggta cagctgcact agcctctata ctcattgtac 34560 acactecect agettgtggg ceteagttga gteacacate cetteatgag etggacactg 34620 ccagcatgga tatctgttca gcaactaaaa ggataggcct cccttagcac tgtcaggtcc 34680 aatctttctc tagagattgg gtctgctttt ccctgcagcc cctggatggc acatcattag 34740 aaagaaggac atgccttcca gtgctgcctc tgtttctgct tacagggata agtatgttta 34800 ttcattcata ctgaactttg tacttgtagg cacctccatg cctgtagaca tgcctgatgg 34860 cttgacttct ctgagaaaca catcactgtc ctaggtagat tttagaactt aagagaatgg 34920 tacccacctt gtcccatccc tacctctcca ctccttggct tttctttgaa tattttaatt 34980 acctgtccat cctaaggtca cacacgtct aatgtctgga cacagttcct cccacctctc 35040 tagagtecat aaatacetag gaagecagta cagetttaca aagaagactg ettettetga 35100 ctggccctta tgggcctaat acataccaaa tctctcaaac acagtgtagt gtgagaatct 35160 aataagatca tatgaagaat gtttagagca gatgtacttc ataaatatta gtttcctaca 35220 gaacgtctgt cactcagacc ctctgctttc tctcagttgg gctgcatttc tctctcatgt 35280 ctgtcagtac ttagttccct ggcccgtctg tatccatctg ttgtcatatc gtattgccct 35340 cccttgccca ttattcatcc ctcaaacctt tctggaaaga tccagctttg gaccagcttg 35400 getttettet teatactact gteaaggetg eagagggttg tteactaate etagetactg 35460 agtgetettt ggtggteete etgegtggee ceatetaggt ettegtettg teeteeaaag 35520 atttgactgc aaccttcatc ctttcctcaa atttctaatc tctcaaactc tccattcttt 35580 gcagataatt tgactttcta gttctcagga ggacagaagc catgctagaa agttctaaac 35640 ceteettace tggeetacag acetggetet gteeetgete acecetecea tetetagaga 35700 aggtetteca ttgtgtgttg gattecagte cetggecate teagaageaa caetgtttae 35760 tecatetett gggeteette teetaetata gteaattetg etttaaaatg teaetaetta 35820 tatgtacacc tttcactccc ttactcactg tgctgtccca ctgtagtctc tgctgtctcc 35880 tecetacage catetaaage caetttgace tetgttteet tgetteteac tttecaatet 35940 gtetectace caceteaget eccaetacta etteceteca gecetttetg ecagatecag 36000 tggggtccct gtttgggaca cacactcctc tcctatgtgg cattttagga gggtataaca 36060 aactgacttg gctcttcctt ccttaagaat tcccccttag cttcttcaag acataaatca 36120 agacccacag ccaccettet tggtetetge teccagatet etcatggagg tgttetttgg 36180 actoractag gatottotto otoccatgoa otototoaag acgatotoac coactgoago 36240 tageteteat ettgecagtt gaageetgea catteaettg gaccacacat acageageet 36300 tetggecate eccaccaaaa acaaagaaac caacagetee aaataggace caaactcace 36360 gcccaagctt accatcccgc atcacctgca ggagtggcct caccatctgt cccaccatct 36420 gaagcagaga aactgtgaca cctccattcc cctgcatatc cagaccagca aagttccata 36480 atgttcttag caatggacaa agagagtgag tttgagttaa aactctagtt ctattgtgct 36540 tacacatgtg tgtttgtgta tatgtgggta tatgtgtacg tatagagatg ttcttgtatg 36660 tggaagccaa acaacctcag gggtagttcc tcaggtgttg tccactgctt ctcgttgtta 36720 ttgtctctca ctgttctggg tttaagaaag ctagactggc tggctactga gtcccaggat 36780 ctgcttatct ctgcctcccc aacactatta caggcatgct cacagatgca catcatacct 36840 agcttttaaa aacatgaatt tggggaatca aattcaggtc tttttgcttg aatggcaagt 36900 actitacega ctaagetate teettaaeet eteteaaetg agetatetee aaaggeatae 36960 agacacacac acacctetea acaggatete aatatgtage etaggttgte etaaaaacte 37020 taaccettet gteteagaat ettgagtaca aaaactgtgg gtgtteatta etgaacteag 37080 ttaaattott aatotttato agooccaago totgoatooa ttaaaatggaa attataacao 37140' ctaattcaag tggtcatcag gataaaggaa agccttcttc acttggtgtg tgtttgataa 37200 taaaagtatt taaataaata aatattcaat aactgagtgc ccctctgtcc ctctctccac 37260 caateggact tgtcttgttg ttaaattgct gtttctatag ttttctgacc ttgaagccct 37320 ccccctcaag atcacactta ccagtgtttt cctgactgag gaccacagtg cctgtttcat 37380 ccctcctttt tttacttttg gggctaggag gcagattcta gagtccccat tacagggttt 37440 gatgtgtett etetetaage tgtetetaga tgeeceeate tecacaacce tgeetgagae 37500 ccaggcctaa tetttttagt etgecatgat ggeettgeec aaageeette teetgeagge 37560 ttgccttcag tttagcccat ctctcgctga ccaccaggtg tcttgtcctc tgacacctgc 37620 ttttcttctt tctttctttc tttcttttt ctttctttct ttctttctt ctttcttt 37740 ctttcttttt accatgtgaa ttcctcatac tcttacatgc agcttgctgc attagctcag 37800 ccctcctgcc tccctgaagc agcctgatat cgtcctcctt gatctcattc ctccccccc 37860

ccatgttcct ctccccccc ccctccacg atacagagga ggaaagcatt tgggagtggt 37920 tgagaaactg aatctcggta cagcgaccag taggatagac tgagacattc agcaaagacc 37980 aactctactg aacccaggag ccaaaaactc tgcaaaacaa gaaaaatgta acacaagagt 38040 gggggcatgc tagtctttac tcaaaatcaa agtagagcta ccttgtctcg aagaatctag 38100 aaaatgccaa taaagtggag aatcctccca ctgggctgtt tctctctctc tctctctct 38160 tototototo tototototo tototototo acacacaca acacacaca 38220 ttttgttttg gtttggtttg gtttggtttt tgtttttcga gacagggttt ctatgtatag 38340 ccctgactgt cctggaactc actttgtaga ccaggctggc cttgaactca gaaatccgcc 38400 tgcctctgcc tcctgagtgc tgggattaaa ggcatgcgcc accaccaccc gctctctccc 38460 aaccttttgt tgatctattt ttttgtggtt tccttagcat gcgatcaaat gtatgagctg 38520 ctttatctgc ccaccccacc atggctacct gctctcccac atggactgca gtgggacctg 38580 tcatgcttcc tgacttttgc taccaatgct ggtcttatta ccaatgcagt agtgatactg 38640 aggcaaactg tttggcagtg aaacctttct ctaagccaca aatccatagc ttaaaatatt 38700 gaggcagaag atgcaaaatt ttctaagagt gtaggttttt ctgtttgttc atttgttttt 38760 agtggacaaa atcaatacac tgcctcagct agaaagaaag aagtgaggca aaaggtcata 38820 ttttqttttt ttttttttt tttttgcttt gtttggggat gtttcctttt gacacagaat 38940 ctcaqqaqqt aqcccaqqat qqccctqaac tttaaacctt ctqcctcagc atcctaaatg 39000 ctagaaccaa acacatgtac aaccacacct atctacttat gtactaatta taccaaataa 39060 tggatttgcg ttgccctttc tatacacgtg tacttatact tcgatggtca tgcccatcac 39120 tgtgtcttgt tcccactccc ctggcccttc caaaatagtt cctctctct cctctctt 39180 tttcatctag attccatgca tgagacagaa tatatttgtc agtctaggtc caacttattt 39240 cacataacaa atgtcaaatt ttcaaatgac aattttttaa ttcttgtttc ttatttcatt 39300 ttcctgtgct tatacatgtg tggtgcatgt ttggtgggtg tgtgcatgca gaggcttggc 39360 agtcaccctc agctgctttt ccacgtttct ctctgaggca cagtctccca tcacgtccag 39420 ggctcactag tatggcgagt ctttcaagcc ggcttgcact agagatcccc tctttcctct 39480 ctgggatagg aattctcggc atgtgtgtga gttctgggga gccacctctg gtcctcatac 39540 ttatgcaaaa agtgttttaa ccacttggca ttctccccag ctctcattcc tttttattgc 39600 tgaataaaac tccactgtgc gtatgtacca cattttctgt atcccttctt cccttgatgg 39660 gatctagact ggttctgtag aagtgccatg aaaactgctt tggtacagat cgatgtctgt 39720 gttgtgctga ctttgtactc ccttcagaca gatgtccaga ggtggtagaa ctggatcata 39780 ggatagtgct attitutete tetetetete tetetetete tetetetete tetetetete 39840 ctttttggag aagcctccac actgatttcc atagtagctg aactaaattc tttttaattt 39960 aactgaaata gaggcctgct tagagccaag gtataatctg taagaaaagc ctttgactcc 40020 agtgaagttc ctggctttgt tgtggtaaag aagcatttgt ttctagtttg agtgttcatc 40080 tgggtcagta agaggacaga ccattcccaa gagtgtgctt tgctctgagg gagagaaaaa 40140 ttgtccagta tctaatggtg caaatcatta gttgtgttaa taaccctaca ggggaaaaaa 40200 tcataataac gtatccccct ttcatgtact taatgtagct aaattttccc taatgagtta 40260 aaagtccatg gaatttttgg agatagtaat tggctccaca ttggaaatgc tcaagctccc 40320 tgagccctgg gctccagtaa gacaggtagt aaacctgcct gagccctatg aagccctgtg 40380 ttcacctgag gtctccttgc cagagtccca aaagaaacca ggactcagca ggttgtcttt 40440 tcatcttcac ttacagggtc gccaagtcag tgtgctccta acctaattct gaactccctt 40500 ctttccccca cagtgtaata tttacctaac tggttgttca aatcaaacct tgaaccttgg 40560 ttctcctttg tcaccatatc catcagctgt tgattctact tctaaaactc actgccactt 40620 agateteeeg agtgteeatt tetetteate etgeetaeet geeetetggt etceaeteee 40680 attecettag gaacageeet gtgtaggete ceatttetet eetetteett cagacageae 40740 agtagecage taaaagggte tteecaaact gaactgtggt gacateatee acceetteet 40800 tagagcagat cacgatcett cetttgtagt taaagcaaag gtcagagtee aatatageca 40860 agagtgccat gcatattttg cctggccttc cttccacagt gaaccaccca ctgtgatcct 40920 tgtagetatt ggacecaget tetggeeate etteagttee tgeageteet geteaggace 40980 tgtgtatatg ctgtgacttc tgcccaagac aactgtctgt tccctcacct gtgggctcat 41040 cacccctcct tcccacagcc ctgttctgcc tgggtcagct catttgcttc tctagaaaca 41100 tggtaagtta cattttgcct cccataaaga ttccaagaac cctcttcagt tcaaacttct 41160 acatatacct ggctgttccc tacaatagag gtttgctctt gtgacagaca gcaggctcca 41220 caaaggtgac cccactgctg tagtgctcct gtgtcctctg ctagctcaga ggcaggtata 41280 aatgtgcttt ccgagtacga attacatggc cagtgcataa gatgcccctg gtggcagtac 41340 ctgtggatgg cagageteca gtgacaggae tetgecacag tgagaggttg gegtttecae 41400 agcacatcca ctgcagggag ctgacttgtt tgattctccc tccgttgagc ccaaactcac 41460 tggtttttct tttctctttg tttagctgaa gcttgctttt actctggacc atgagactgg 41520 attgcctcaa ggatgtcaca tctatgagta ccgagacagc aacaagtaag ccactcactc 41580 aggggaaagc atcgcctact tgctgagcag ctggggcagg ctttctgact cgggcttccc 41640

ttacaggggt gctcaacatt tttgctacat gtgagaaaat gtctggcaca cacatacaaa 41700 atatccaccc caaaagtctc ttttgacctt aaatataata gaaaggaact tgtatagagg 41760 gctagagcaa tggctcaaag cacgtactgt gaaagtgtaa ggacctgagt tttaaccccc 41820 agaacccaca taaagccagg ttcaatagca caagtctgta accccagtat tcctacggtg 41880 aaatgtgaga aagagagaag agagtccttg aaggtcagat agcctggtat acagaaagcc 41940 cctgtgccaa acactgtgga aggtgagaac cacattgaag ttatcctctg attccatatt 42000 tcttcatggc acacactcat gaacatttgc acataaatgt gtgtgtgtca caccatacat 42060 atacaatcat acacgcatgc atggaaataa agcaggtgta aaagagttgg ttaagagtaa 42120 gaagtgtgtt aggaaaccag ccctcctttt caggccccac cctcctcccc acccctcccc 42180 agtactcgcc ccttgcctgc ttatctgagt cagctgtgac tttggccttg gttgtggttc 42240 tgtagccacc gactccccac ttactacttc tgtagtgatc ctgtggctgt gtagttggga 42300 ggtggacaca gatgcaaagt agtgtagccc tgttagaaaa tggccccagc ataattttaa 42360 agtacctttt ctctccttca aagactgatt ctctgagtgt gtgttgtggt gtggtgtgag 42420 acagggacag tggtggtgag tgaggcagaa gaaatatgcc ttgataatgc tggtgctggt 42480 ggtggtagta gtggtgatgg tggtggtggg gtgatggtgg tggtgatgat ggtgatggtg 42540 gcagcagctc acatttgggc acctgctctg cattagactc atgggaacca gtgtgtgcca 42600 ttcctactta accctcatca cagcctgaag agtgctttca ttactatgca ctgcagaagc 42660 taaggcctag ggaactctgc cagctcactc taagtaattt acatacacag tcaactttaa 42720 catgtctaca gtggaggaag actaggtgga agacagttgt taccactctg ggaaaccatc 42780 ctcaataacc agtagaccca gcctagactt gagaacagtg tgttctggta tcatcatata 42840 actatctaaa ctatgtaatc tcacccagct gaaggaatag gcacctgcca gcatagccag 42900 ccatgacctc ccagaagaac tcactgctca gatgtgagta gaagataggt cagtgttacc 42960 cttgtgacca catccacatg caggttgcct tctgggtatc attgcaatgt ctgtatcttt 43020 aggcagatga tgtacttatt attggacaac actaattccc acttcatgaa ccatggagaa 43080 ggccatccag tcatcctcaa tgcctctatc tcccatcttg tatggggcta catctagaag 43140 gcatcccagt gcttctaaag ccattgtgtc aaaaatacca tcttggtttc ttattaagct 43200 caggicatca gcaaagicaa totgggatto totgaagoca aaggoaagat gggagaactg 43260 aacagattcc tgagtggctg ggcaagcttt cttagagact aagcacataa cccataaaca 43320 gtacagcata ccgttctgct tcccttccct tgctccacac tgttctccat gcctcggccc 43380 tcactcttag cctccaactg cttgtcagga tgctctgttt actgttagtc ctctgcagaa 43440 ccctcttgcc tttcagccac cagccagcct cacaggtctg cacacggtac cttccagagc 43500 ttcccagtga tacaaagcca tcttcccagg tcatcctggt atatttgagt tattggaaca 43560 actgtttgtc cacagaccct atccatgccc acataccact tagcggcctc tctgtccagt 43620 acttatcagg agactggcag ggcagccata ggcctctctc tgtacaagcc tgaccactgg 43680 gaaggaatgg agcatctggg tagggactcc caggctgcac ttacttttaa gtcatttcag 43740 ccagtctatg ggaagcctca gtgccaatgc cctttggagc caactcccct tctttagggc 43800 ctggcctgtg tctgggctct acacacatgg ggtaatgcta gatgactcaa gacattcaat 43860 aggaagaggg ctccaagaca gctgcagcat cagaactgag cagccacgtc tgggactatg 43920 gcaggggatc gaagtgtacc tttccctgtg taccagccta ggcgggggga gcaagggatt 43980 ctggaccaag tcccatgttt aattaattca tccctctgtc tacttgattc ttctcctctt 44040 ccttccccct gagcaagctg atgaaatatt tcccagcagc ccctgacaac ttcaaaccaa 44100 catcagcact tgccagcact tttgaaatgg cactttctgt ctgtgcttag agctattgcc 44160 agttctgcag actaactgca gtgttaccta agagccactc ctgacagagg gtgagcacct 44220 ctaggcctcc cgcaaataca gacgctacca ggtcaaaaca aagaatgatt ttcttgttcc 44280 ttgtaaagcc ccaggtttgg agaaagagaa gctgaatcaa ctcagagata ggaagggctt 44340 gcagagctgg aggcagcaga gccatagaag tgccaaaagt gacctcatgg gaacagttgg 44400 agctggagca tacatgtgga gtcagccact cacagtgcag gggtgggctt ctgtgaccct 44460 cacagcaggt ggggtttggt atctccatga caccaacact cctgcttcca agactgagct 44520 ctgagatgat gtctccccac tgtctaccac acagaggggt agccttggct cgtcctgttc 44580 ctgttaccta gcatgagaca ccaacagcag caaccagagt atgctgggtg ctaaaataca 44640 gtgtttgatt ccacttggtt cccctaacag aaggtaagaa accatacatg ttcttacttc 44700 acagaaagaa gaacctgtga tctgagagat gcccttccca aggttgtatt taagaagcag 44760 acaagettet tecagggtge tgetteetet atgaggtgea tageagaett gggeeeagee 44820 tgtgggtcta cagagatctg atgccaagtt gcctaggaat ctgggacagg gaagtcagca 44880 ggactagggt tgctgctgcc ccatcagggt ttatagtacc tttatgtatt gtgtgcggca 44940 ccttcatagt cgctgtctat atacatgtaa tctgtatgtc caagatattt attagggggg 45000 ctaactcagc atcatttctc aatgaagttt cttaccagag gtttcccata ctgacaagct 45060 tgtacttggc tgttcagaca ctgtttccct tctcaggcca gaactgttta aagcaagcaa 45120 acatgaaagc cagaaaaatg agctgattgt gtgctaacca cagacccttt ggtacatgca 45180 tgtacatgtt ccagcatgca gaatgacaca ggcattatac tgttttcttc tgtggcgtac 45240 actagaaaaa aatgtataca gtaaactcac tttgtaaaac ttactttgaa accattatgt 45300 gcagagagaa aagctacaga ccctaagtgt gtatagttca aggccatggt ctccaagtca 45360 ttgttctatt gctgtgcaga gacaccatga ctaaggcaac tcttacaaaa gagcatgtta 45420

ctggggactt aattagtttc agagggctag tccattatca tcatgtcagg gaacatggca 45480 gcatgcaggc aggcatggca cagaagcagt ggctgagagc tacatcttga tccatgggca 45540 gcaggcagcg agagatgggg gaggagagag agagagacag agacagagag acagagaaaa 45600 agaaaaacag agagagagat taatattgat tgattgattg attctggacc tggtgtggqc 45660 ttttgagate teaaagteea teeteagaga eatgetgace taaeteacaa ageeacaeet 45720 cctgatctta ccaaacagtt catcagctgg ggactaaaca tgcaaacatg tttatggggg 45780 ccattttcag tcaacccccc acccacagca gtattagaaa atgaacttag ctgagtggat 45840 cccataagcc tgtagaatag cacttaggag gtagaagcag gaggatcaaa agttagggtc 45900 atccttagct acatattgag tttgagacca gcctagactt caggagatac tctttctttt 45960 tttttttttt taatttattt atttattata tgtaagtaca ctgtagctgt cttcagacac 46020 tccagaagag ggcgtcagat cttgttactg atggttgtga gccaccatgt ggttgctggg 46080 atttgaactc cggaccttcg gaagagcagt cgggtgctct tacccactga gccatctcac 46140 cagecegaga taetetttea aaaagaaaaa aagaaaaaga aaatgaacee aaacacacte 46200 aggtcaggaa atagactatt agagccccct aaacacacac atactccatc catcccccat 46260 tcagaacctt cttcacatct ccaaaaaaat ggaaccattc cacaagtctt agtttttctc 46320 tgagtgttac atttgggaga atccattgtt gtatatgatt gtgtcccttt gttttcattg 46380 ctacagaatt ttcctttgaa aagctgaaga tataggacag tgatagagca cttgcctggc 46440 atgeacaagg ceceaagttg ggtetetaae agagegataa aataaaatat tttgagaaae 46500 tacaggaaat ttttaagaaa atacttatat cagttcattg agaatttcat atactatatt 46560 ttgatcatat tcaccccaq ttcctcttc taacttcccc acctccctac ttcccccatc 46620 ttcttgtcat cattgttttc tccccctcc cccctcccc ctccacctcc tcttccccct 46680 cctcctcatt cccttccttc ctcctcctcc tcctcctctt tcataatgta ttgactctaa 46740 tttgttctgt ccatatactt ctgggtgcaa attgacttac caagagctac acccctaaat 46800 acaactgatt tcatttctat cccagaagct ctcaactgtt cataggtcct cagctaaggg 46860 tgaaggetea taaactetge cecagteeat gacagagtae tgeetagget tgatettgtg 46920 caggtettat geaggtgaga tggetgetgt gagaeegtge gtgeatgtee etgteatgee 46980 caagateetg etteaceeet tgaattetgg gtteeetgae eteeaaetet etetaagata 47040 gtacctgagc tttagaggtg ggcttgatat gtatgcccca cttgtggctg ggcactccag 47100 cgatcaccgt ccactgcaca caagaagttt cccgatgagc tctaagagct gtactaactt 47160 acggatacaa aggcacagat ttagagggca gttaggctgt gtccttttag caaaataata 47220 acattggcca aatttacaga accagatatg tgctgcctcc ggtggaatgg gcttaagttc 47280 agccagtaag tgactggcta cctcataaca tttgtggcac tactgcacca tgggcatagc 47340 ttaccaccct ggtcactact gcagctcacg gggctcacag cttcctttct ctgatatcca 47400 cactattgag gactattgaa tattattgaa gattttcccc acagcagcct gcagagtatc 47460 tttgagtatg gtgaaggtta aacagcaggg aggaagcttc ttagtaccaa cttgatttct 47520 ccatgtcctg tgatgggcat gtgtgggtaa gcaatagggt cttatcatca tgttctggta 47580 ggcaaccaag ctatgaaagg cttttagagc tgggtataat gtagttccag catttaagaa 47640 gtggatcaag agtttaaggt caccettgge tacateatga aattgaagee atettgaget 47700 actcaaaccc ttgtctcaaa agcaaaacct gatcatctat tctgcattaa tctaatcagc 47760 gttctgattg tttctgcggt caagttatta cagataaatt tgtttatgct tttgtgtgca 47820 catgcatata ttctgcttca gtgtagacct aggagtaaaa ctgttcatcc tacacaattg 47880 tatttagcaa gtagcaagag ttcaggcctt ttctaacttt ctgcctgatt ttccagtttt 47940 tctcctcatt gtgtttttct gcctattcag gatatgaatc ctttgttgac tgtatatatt 48000 gcacatatca gcctagagtc agacagtaat gactagagaa caaagcaacg cctaaggcac 48060 tgcagttctt tcctggagga atagaagtta acagcaccac tttctggttc ctggtctctg 48120 gccagccagg gaatccctaa agctttgatt ctgttgattg tcactttgct ctaagattat 48180 gactaaggaa ttgagcttct agaatcagtg accagagttc tccagatttg ggatagccac 48240 ttcttttctt ttcttttt tttaatcaaa agtgtctttt agggacctaa ctttatggat 48360 gactetteag ceettteeac teatteeetg tgtggtgtea taceteteag ggaaaceaat 48420 caggagagtt gaattetgga ecceaettaa teattacaag agatagtaag gaaattetta 48480 atgcatatac caaatgaaca tgctaaagaa actggtgatt ctgcagttat gcatggattc 48540 agaaatctgt aagcccccag agcccagaac atttaatgtt ttggagttct gtgattgaat 48600 actgaggatg caacccccaa gattacaaag gtctccctag aggagaactg ttaacaaacc 48660 acaccagtat gtttgacatt tgctcctttc tccagtaggc ccttcctcca atgccctatg 48720 gtgctctcat ctgccccata tgatatcttc ctttctctga tatccattgc caaaatgctt 48780 tgtagcacat ggtgacatgc tctcaccacg tggggaaggg gttaatggta atcagcatct 48840 ttactgtctc tgaatctata gtggtataca cagctatact gttctctcaa tttcctggcc 48900 tgaccaagtt getteetttg eettetetgg gtacetgtge caggeacaca tetetggege 48960 ctatacagac acacatetgt aacceagagg tgeteeagaa ecaaceteta caageacata 49020 gtcatccggt agccttcaaa cccaaggtgg cttgttcctc tctaagactt caagaaatcc 49080 tagagaaget gtgatetttg ggeetgtaee ceattgaatg aataggeeae acattgetgt 49140 ccagtagaca gtgagccaca gcctctctct accagtatgc tggaccagac actaggcaca 49200

```
ttcacaaagt gagagtgtca agtgtgtctg ctctaatcac ccaccccagg catcagaggc 49260
ttgtgacact cacaggttag ccctccagga agcaggccac aggacttcag gttgagcctg 49320
gagaaaggtg cccatggccg tcacctccag cagctacttg gcaggtaacc agaacatgct 49380
tggctcactc agctcttggc tgtgctcccc agagggaagt gtttctaatc tgtcgtcact 49440
gctgctccca tatactctga ggcattgtgg ctttttcttg gtggttgggc aggaagcctc 49500
cagagectaa aggaattgee atgettgatg acagacaaag getattgatg getataaate 49560
acttagctgc tgcctggctt atttaagagg aagaggacat gttaactatt ctgaggatag 49620
gccttcctgt ggtgggtacc caactgaaaa gggatctcac agattgactc cagctgtgcc 49680
cgctgagtta agtggaagga aatgccccac ttagacatga ctttgcaaag ccaaccagca 49740
aatcatccca ttgacttgta gctccacctc actgggcatc ctcaagtgac ccaccttaag 49800
cagtgtttggg ccaggatcca aggtgaggaa gccagaggct gactagctgg gacggcacca 49860
cattgagtgg gggctgttct caaggaggca gatctggctt agccctgaat gtggagactg 49920
tgctatcacc atcatgtccc tgaaggctgt ctagagctct ctgattctgt agtcatgcct 49980
                                                                  49999
cccttggggg aagtgctcc
```

<210> 12 <211> 38886 <212> DNA

<213> Mus musculus

<400> 12

acteacegae eggggetttt gtetecaaag etgagaeate tecatetatg teettettgt 60 tccttatttc ttcacataag acactgtgac caccttctcc tgggtgtgtg acctagcttc 120 gttagagctg tttagaattc gagaaataca attgtcttgt agttttcact gggagaggtc 180 ataacctttg cccgttaatg tatatatcct cttaatgaca tcagctagac aaaactaagg 240 tacagtatgg agattgaacc taaaagttca tacatagcag gcaagtgctc cacgagctgt 360 atccttagct atttttaatt ccttattttg agacaaagct tttctaaatt tcccaagctg 420 gcctagttat ccttgacctt gggatcctcc tgtcttagtc tccaagtaag attacatgac 480 tgctgtgcca tgcccagctg aaaatgtttt ctactgagtc tcctacactc tacacagcca 540 ttttccctac agtgagtgac cgcagagtca cagggttttc ccttgacttt actgaagcct 600 tgccctgtgt gtctttgtct ctgccctgat gactatcaga gcagttgtca cctcaccacc 660 ttctatgtgg taactgtgaa cactaggcct tgtggggaca tagaaccata gggagagagg 720 caaatgttag aatteteate eeaggtgaga gaaggttata gttetgagee aagaetaeee 780 tgggtgcacc atacagcaaa gtgcctgttc atgcagacat gacatgtttc ccacagctgc 840 ctttgaggac acctcctagt tctgcaccat cttcccctct ctgagattct gtatgtttgt 900 qttctacatc tgccaactaa gctaaactga ctcaactatt agatgcattt tcctacccca 960 teccatecta taccacecaa etgeacetea tttececeat eccaceceat eccateceae 1020 tectectece tecegecaaa teccateatg aagtgeetee tteeetggag cetageaggt 1080 tgcccaccac tttatgctaa atatgtgtcc tctatccttt agtataacca gactagtcag 1140 gtggtcacca tgttttgtgt aaggaatgcc attcatcact gttctgctca tgaaacagaa 1200 tgcccttttc actccctctg actttctcag tgaattttcc agtgctgatg tcatcaaact 1260 tgactcccaa tttttaacaa ccctcagtct cagaactacc agtcccctgc tgagtacttc 1320 aagaggeggg tettgeetet geetgtgeaa eteagtggaa tgtgaatget tttgaetgtg 1380 aggtagagag tgcatattaa gaggctttgc agattttctg tagattctgg ttcccagtac 1440 ttagagcaga cetgggacec agceagggge tgetgaggag tttgtagcae tgatgaagtt 1500 ctgaacagtc cctccagcag agctagcaca ctgcggatgc tcagcagaca ccgggtgcac 1560 gcctctcctc gcaagcatgg attgcttccc ctgcatcctt aatcttagca tgatgcctcc 1620 gtttcttcta aagcaccagg cgcccgtctc cttcacttac tctagatggt tctcatggtg 1680 gaggttaaga attccccatc tgaactctaa accaaatacc ttatgaactt ccaagtttta 1740 gattttagag catttgagat tttatgtttg tattccagag cctatgcaaa tattcacaaa 1800 tctgaaaatg aaatctgaag cacttttggt ctcagcattt cagataagag gttaacagcc 1860 tgtatgctaa tcatatttat ggaatactta gcagtgtgtt ggcccctaag ataagaactg 1920 atgaaacatc tacaccttcc tggaataacc tgagattcca cagaccctgt ggtgtttgga 1980 gccccattcc tgtgcccatt gagttaccaa gaccagaaaa ccactattgc cattgggctc 2040 ttgggaaata aaggttccat tcacataagg atgcccactc cacacctacc accatcattt 2100 ttgcagtccc ttcctgttca ggcaagctca ccatgggagc caagccagtg ctgttcagat 2160 cccagtagca atatccacag ccagagagat gcagaagtca tataggcaag agcctatatg 2220 cggactgtta cataccagac agttgtgtcc ccactgctaa acctagagaa atgttccaca 2280 aatggcccag attgcaagaa gaaccctggg aaattctacc atgcatctca caaattagaa 2340 gaccagtcat tgtgtgtatt gtaagatcaa tgtaaacctc atgcctttgc ttgtctagct 2400 agagccaagc actgtgcagt gcatggaaac aataaaggtc cagagaaccc actgagggag 2460

acaggcatgg aaagcaatat ttataacaaa tacttagggt ggggcatgat gggagaaatg 2520 teettggget caateagete atgateagat gageggtgtg gtggaaacae gaggtgggag 2580 cagcacaggt cacccagctg tggccagaaa gcagcaaatg gcaagaggaa ggggccagga 2640 acaaggtata gaccccaaga attcccagaa ctcaggccct gaagtgcccc ttcctcctaa 2700 atactotgcc atcotccaaa acagtgtcat cagcaaggga ccaggccttt aactcatgaa 2760 cctcgggggg gtggggggg cggcatttca tgttcacacc ataggggtga caaaggagtt 2820 aggagecagg eteceaggat geecageetg ggaaggaaag tacatgeact gettetetea 2880 gctggggcct cattggacag gcaagtgccc tgtgagcagg tgtcaggtag gagcctgtat 2940 tttgacatgg agaggacaag gcaggtgcct gggtgctgcc aggtggaaag ggcaaacggc 3000 ctgtgtgtgt gtctggtgca gtccaggcac gtgcagggga agcccagaac tcgctggatg 3060 ggaacacacc catctaaagc actctgaacc cagttcataa aaccatgggt caatattttc 3120 aaagtcacag aactaatgag ctctgccaga ctcaacagac cgcatcccag tgggtgataa 3180 gacaagtgtt agcacagagg aaacggccca ggcgggaaga ggcttttctt aatctgttgg 3240 gtttcgtgtt tatagtaaag cagctgccct tggacaagag tattcattta tcaggtcacc 3300 cacaaaggag gettagttac tatgeteace etgtttgggt ttaagtaata actgtetaca 3360 qacaagtaaa aattggatca gggcaagttc agtaggtccc atcaggcctg cagaagctgt 3420 ctcaggctct gactgccaag ttcgtgtgcc tgttgtccag caggaatagg cagagagaaa 3480 gctgtggaaa ccctagccta gccccgaaga gctctatttt caccctttaa aaatgtgtgt 3540 tgtcttccac tcagtatttc tgtgaaacag cagcaaagaa tgattctagt gtgctcattt 3600 agtccctgaa cagttcatca gcatcccact tgtctctggg attcccaaga ccattcaggc 3660 ctagattccc cccacacctt ccttcccacg gcttggggtc tgcagaggaa agtgggcaga 3720 ggaaggggaa gagccagctc acattggtaa ggccttacca accaggaaaa ataaggatgg 3780 cagtgaccca gctaagcatc ctgagtacta cagaggaggc tttgtgaggg aggcctcact 3840 tccaacagag attctgtcac ctcctgagtc ctggactaag gtacccagag tcaccttctc 3900 actcccgcta gcttctgtgg gttcagtgac acagatcagg acccaggctg tacctggaag 3960 cgtcagtctc acgagaggtc ttatcttact cattctctgt tgtcttgagg taaaaacagc 4020 atgtgcagaa ctgtaaggtg ctgctggtct ttgtaaataa agaaataatc tctgatgaaa 4080 agtatttaaa gcatggaagt gcacacctat aatacccaca ctcgggaggc aaaaacagaa 4140 acattgccat aggcttgaag ctcacctgag ctatgtagtg tagcaagttc cagaagatct 4200 ggactgtatg gttaagactg tcaccaccat catcatcata atgaattgta tattattata 4260 ataatattaa aaagtattta gtggctgctt cctatgtcct agtcactgtt caagggactg 4320 ggaggtaagc tgtctgagct ccccaggtta gtgacattga gcagctgtga ctggcccaaa 4380 agaatgcagg gacaggaaga acaggaaaaa aatcacaagt agtcaggtag agccccaagc 4440 taggactgca gtaggcagag caggagtgag caagctcaca cgggcaccac taagagctga 4500 tccaaccatg gtttgtccgt gactgatggc tttggagcaa agcaaggata caagtagaag 4560 ccacactcca acctaagagt gtctggctcc aggatgccct tctcctgaac cttggacttc 4620 tggtgaaaac ttatggatgg tggatcccta atggtttccc aagtgcttgt ctttctagga 4680 agettatttt aaactecace eecatgeaag gteaggetat ggettaetea gatacaateg 4740 taaatgtcag caaagccatg gagaagatga agaagtaaga aggatcatct cccttttacc 4800 ctccaaagac tgaagcctgt ggacagggcc ctgggcagtt cacccagggg cttgacaact 4860 tacacagete tgaetaegtt cetatgeeag atgeagtetg tetgeteete ceatetgtte 4920 tggtcttccc cagagectca gaccagcaga cagaaatcaa gccatgettg gttctagatc 4980 tgttgcaggt gcagtgtgca tggtgggaag gggaatgagg cagagcaagc agcttgagtc 5040 actcatgcca gggctccctc cactaatatc cctccctaga gatggactca ggttccttcc 5100 acagcetetg caggeetggt ettgtattge ceagacagag atcacetact teagaagggg 5160 cactcagtac ttgcagtgtc ctcttgattg gatggaacca aacaatgctg ggacacaggc 5220 catececcag acceacagga geageteeac catgeaaate taceteeage ttgaggtggg 5280 ctgcataggt aagctgatac acaaccctgc ttggtaaagg agaagacaaa gtaacattca 5340 atacaaaaaa aaaaaaaaaa aaaaaaaaaa agagtttgag ggtctagacc aactaaggct 5400 tggagttett tagggageag catttggatt teatgtacea teccagagea gggtteteca 5460 aagagaatag cttatacctc cttcccactt aacacagcca cccaaggcca gaaaacctag 5520 agaagccaaa gctgcaggac ttggtggtgc cccacccaga tctgggccct gccacattct 5580 ggctctagtc gtcttctata gcctctgaga ctcagtttcc cactgtgcac attaagacct 5640 acagtttttt tcctgggaaa ggactcattg ggctaaatga caaagcacac agagagcttg 5700 getgeactet ettttettee caecattagt ggeeteacea etceagggtg geettggaaa 5760 atggggccca ccccgccccc ccagcagccc aagcaaagca cactttgaat aaagcagagc 5820 ageotgaget ecegggtgae etggeteete eteteetete teetetagag etatetettg 5880 cagttgtatg tgtatgagag gatccgtgtg tttaaaacac ccttctccct agaacatctt 5940 catacccaaa ttctagcttt caaactaaag ttgatccctc ccaaagtgag aggtgacttt 6000 ggcttccctg agtttatcca agctctgttc ttggtatagg tcttcagggt cagcctcctc 6060 tacttgggtg taagagggag ccctggcctt ggctaggatc tgagcagggc cagaaagctg 6120 ttgcaggcag gcagcagctc ccagagggaa tgtgcttctg tgtgccttgg ccacacctcc 6180 tctaaccagt ggttccagtt tcagtggaac tagagaaagg ctctcatgtg tgtgtgtgtg 6240

tgtgtgtgta cacatcataa aagagccagc aaggcccaat tacccttcac tgcaatgcta 6300 cacagcacaa tgcctggttc tgcttagggg ccagagctgt tgcccacgtg caggcctgcc 6360 ccgtgcctct gtgtgcagag ctaagccttg ggaagagcaa ggcttcgtgg ctagctttat 6420 gctgacaaag ggctttcagt gctgtcaaat gactgcaagc agtcccttcc ccctccctac 6480 cacagocact gggcctccct ttggcagggc cagagggctg cacttgaacg cctagcctct 6540 ggagacttcc ttttgaacta gaaaaacatg gctcaaacat gcttcactgc agcagggctc 6600 tgcctgctga acctatagaa aggcctggag tagattcagt cccacagact agaaaacctg 6660 gctctggcct cacccacaag gcctgttatg tctggctcca gaggcctgct cctctggggt 6720 tttccatgcc tgtgaactag gccccattca tttccctgcg gtttcatggg aacgtccaaa 6780 atattgagca ggttgcaggg agcccaggag gaaaggggtc agtgaaaggc cctagctgtg 6840 acgtggggtg gccctgtggt caagccctgg tgggcgcctt gtcagtctgc tgctgcctct 6900 cctcccaggc accccttcca ctcccctgaa gcttggcctg cagcagcact ccccttcccc 6960 acceccagge etetaettte cageteeeta gecaccagee ecaccetgge etggeeteag 7020 agggaactgc aacaagatct ctacagttcc ccacccccag catccctcaa tttagtactg 7080 caatttgggg ctgctgagag agcagcaggt ctcctgtgag ggtggctgct gtcttcccac 7200 cttgggctgc ccagctatag aggagagtca tgctctagca cacaactcct gtgagagccc 7260 agcagetgee tteacageta etggggagee caagggetee ttaagceaac agtgaggatg 7320 tacccatgtg ggggaaattt ggtttgccga agaaatgaat ttgaaactag ctgggagcaa 7380 ttcttatcaa atttccatgt tagcagtttt caccaagaac taattgaaca atctctgtga 7440 gtggcctaat tccattagca tgagattccc acaaagttaa caagtgccct agtggccaag 7500 ggcagagagg ctcttctgtc tcacacttgg ttttggtctt tgaagatgga tggagtttca 7560 ggtttcagca acagccaggc agatgctcac ctctggccca gtaggcttca atctcagcag 7620 ctcagctcca gatcaacttc agaagccact ttgcaagtat tcagggtatg aaagggctga 7680 tcagaccact gacttcccat cccaagatga atttctcttc tgggttagca ggtaaaatgg 7740 atctgagggt agaacatcct acagacctca cctcccttgc caggcagtat tgagagacca 7800 ggtacagagg agtagaaaat atgaaggcaa agtctgagga gcatgagtct ggacagggcc 7860 tgccctcagc accacctccc cacctgaggc aagacccaaa gttagtgcca gcatctcact 7920 gttgtccaga aactgagttc taggggcaga aacagcagcc acctgggacc tgttcctgtc 7980 cttgagccac agcgaggtag ctgttcctag tgggtatagt actttctctt ctctccactg 8040 cccagtgggc ttgacagttc cagggacggt gctctggggt tacccatcag ccctgtggca 8100 tcatgctaga tgaggagccc agagaatgaa gcatctagct tctttgtccc tgactagcta 8160 tagactgage aagggteete tettettgae agetgeagea tggtgteage attgactget 8220 atgaaccage ettectatag gtageatggt caggacagag gttgeagace tacetacaag 8280 gcccttcctt aacctgctct acaatgagac ataagccagt gactcttccc ttcccctcct 8340 ctgggcctgc tggatggctt cctgcgggct ctctcagggc atgagccctt gcctcctaga 8400 atacettega ettgtetaaa aetagteata aggeeetgge teetteette tgteaetgae 8460 tcaccaaaac tcaatggagc attgcctgca cttgacctat caccccttcc ctgtttttct 8520 aaaccagatt ccccagccct accaccctgg tggtttgcct caacttgcca gcctcagggg 8580 ccttttctta ccctttcctc tgcctctgca gcacttctca cagggcagcc tgctacagct 8640 cctccatgtc cctctgcctt attctaccac ctctaccttc tctgttctgg cctcctgggg 8700 gccagtgcac acgcettegt cacetggete geteaagece tecettaatt gteteatece 8760 tcatccggtc ctactctgtc ccccagcccc aactattccc acatacttat ttgaaacatc 8820 tttcttgctc agtagccttc cagctcctga gtggggtcca agcctgtacc ctcaattcct 8880 tgcctttcca cctcgagctt tgtgtttcat ttctggttcc ttgacatccc ttgacatgaa 8940 tectgettgt gagtgtaeet eeetgtggat ggatataeet gtgggegtet taggaagtat 9000 ttaggcattc tgattgcctc tgaggccact ggccccaaga gcacagactg atgcgtaggg 9060 atataggact tggagcagat cacttcccta tttgcacatt aagctcctgc cacccagaaa 9120 gataagaaca ttgtagggcc ataggagaag tgatacccag ggtggagtga ggccacagct 9180 agaaaagatg agtaagaaat ccaacaaagg gattcaaagc tagctctgaa agctgaggcc 9240 taccagccat tgctagtgta aataactctg ctgctgtgta tgaaggaagt agtactcagt 9300 agataaggaa gtagtactca ggagataagg aagtagtact cagtagattg gttagggcct 9360 gtagagaaaa gatcaggaga cttggtgacc ccaaattatc agcatgcctg gcagtgagta 9420 ttaggaagtt agaaacacct gagaactaaa cagaaaggac aatagtgata gagggaccca 9480 acagtectae etectgaact ggageetgat gecattgete ecaggagtee tteactetgt 9540 gcaggttgtt gaacatccac tctgggacta gcacatatac cactagggat ggagacgaga 9600 tacaacctag gaccgagaga ggccatcaca gtcatgaagg ccagatgcta tgatggggac 9660 caagaggatg ctaagagaga gttcctcatg ctatcttcca aactgagtga tagccaaaga 9720 aaggacatga gcgaggagca gccctagtac tctgggctgt gagaacagta tatgaaagga 9780 cagaagccaa aagggcctca ggacttcagt agagccaaag taggatggag cagggaagaa 9840 gagtgatgca gtccaaacat acataaaaca taccatattg tttagccagg tagaggaact 9900 gctagtctta aacagtggtt cctgctggaa gggacatgac cctgttttgt gtgaaggcaa 9960 cacagtagca ggagatgacg acctggacaa cagtgatgac aggaaggaaa gcaagagatg 10020 cttctggaaa tctactccag atcctagaac tggaccattt gagcaactct tgcataccct 10080 gttgctcttt aaaaagagga agaaagaaaa gaaaaaagga aaggaaagga aaggaaagga 10140 aaggaaagga aaggaaagga aaggaaagga aaggaaagga aaggaaagga 10200 aaggaagaaa ggaagaaagg aagaaaggaa gaaatggaaa gggaaggagg ggaggggaag 10260 tgcccagaca agaggaggtc tagctaggct agggtagaca cactgtagtc tgagtggtac 10440 ttatttatgg ccaggaactt ggtcgctgat tttcacttgg ttggcatgcc tgccttcctc 10500 agaggettet cacctaacca etgtetgace tgteaggatg etgaggttat gtagaetgaa 10560 agaccetaca tagagaaaga cacaatetea aaaaattagg taaatageaa ataataacca 10620 catttggaca caagtaaata aacatggccc agtctgggtc ctcggatggt aggtgcagtg 10680 tccagcagca taagttgtgt tgagcatact cacttcctaa ggtaaagaat gcctataata 10740 gtaataaatt gacagcagtg taaatttgta tctgaacctt tccctttaag tggtatcagt 10800 accepticted geggaagett cettiettat gacateggaat gigcatetet gegigteact 10860 tatatatagg ttgattatgg cttgccagga catgaaaccc tggctcagct ggtccctggg 10920 atgagaaaca gcaaaccttc cccctctttc cccaggcctt gcaggcccag acagcaggta 10980 gggactgctt gagagaggc tgcagagctt tcaccgtgat gtcctggctg acagcctcct 11040 gtcacagaag agtcctaccc aagacctcca gagttgtggg gccccagtgg ctcaggcctc 11100 cagatgctca gcagatgcca gacctgggac tgaggcccca tctctgaggg cttggcttgc 11160 tgttctggaa ggtgatcctg gctgtcagcc attcttgagc ccctatttag agcagttgtc 11220 aggcagttgc tgggattcag ctagctcccc atccccagca gggctgagtg atctcatgcc 11280 tatgcgatgc tgtcgcctgg ggaggaggtg ccctaagact gaaggcaggt gcccagacca 11340 gaaggagagt ctaggccatg gcaacccaga caaccctcag ccactttccc agttccatac 11400 cctaatgtgc tccagcctgg ttcatttgcc ctgggatagc acaaggcatc atttgagttt 11460 ggctgcaaac tttatgtgaa gtttgcccct ttccccacaa gagaggaaag ctcagattga 11520 taageteget tgccagagae eccacageca aceggtttge acagaaceet cageecaaaa 11580 ggcagcttta gctaacgaaa cagcaactgg cactccaggg acccctggac tttgggccac 11640 aatttgtaaa ctctcgagct attcttccca gaaagttctt gggttctaag tggcttttgc 11700 cacgtcccag gactggaaca gaagagtctg gtggccccct gctgatcact gtgagaactg 11760 cacaagggta gacaggtgcc agcaagaggg gccttggcta gccccaggtg agaggagaa 11820 tctgtgcacc cctccatggg tgattggccc cacagggaat cttaagttca gtggagctct 11880 ggctgctgct ggtttggcca tgtctcagcc tgtcagttct agatcttcta gatcctgggc 11940 ctcctgggag tctgggagct cctgggccag agtatcgctg ggtcctttgt gatgtgcaca 12000 tgcttgctcc ttccccttcc acttgcagga tgagaggatt ttaagatcat ttcctcaaac 12060 caccctagga cactaacgag ccttatccgc acccagaagt gggaactttg ttccgtgcat 12120 cctcttggtt ggtgacagga tttaagttaa tgctttgctc ttgacagact gttgtgaaga 12180 attcctaggc tgatgtctta actcagaggg agagaggaag cgaagggcag atggacaggg 12240 ggtgcagaat ggacagatgg acaagggcta ctaatggaaa taggaatcac aggcaccaag 12300 gtgcctgaac aaggccagcc tatgcaacca gagtcatgcc agattgtgat cagagttaga 12360 catgetette tttteteaag gtettgggea gettacaggg etgtgeagat gteeatggag 12420 gataaattgt caggtcatgg tcactggaga agctgcttgc ctggagtctt ctcatgcctg 12480 tttcccatag tggcccctcc ttcaccccat ctctcttctc ccaccatgaa ctcatgtgga 12540 acaaagcaga agagtteetg tggaccagga etetggatea teccateaaa gtetetgaet 12600 tatagcttgg agcatggaga agggtccctg tcctgagcca ttagcccacc ctgctcctgc 12660 ctgcctaaca gccttatcct cacagtcctg ctgtggggcc ctactgccac ctgccggctt 12720 catttacaaa ctgcagtcct agttcagcct tgggattaca agagactgtg tactctggtc 12780 aacaggatto tgagactgca caaagagaac aggtctggaa acagtcctga cttcccatag 12840 cagtgtcaga gcatttattt aacagtctga gcagggacag acagcatccc agcactgtgg 12900 aggttgtgac aaggtgaagg attatcagat gtgttagtca tttgtgtggt gtatgtgaag 12960 aaaggaaagc accactgtgt cttggacagt tgatattcct gcttggtatc tggcccagaa 13020 cacatgttcc ctctgccttt gcaccagccc tgtgatcaga cattagcatt gtcttacttt 13080 gggaaggaag aacaggagat tcaccagggg ttccacaaca agagtgtggt agaaccagca 13140 ttcaaactgt ctcagaggct tggtggtcag tgatggtgat tgtcagtact gataagcaca 13200 agaagggatt ggggactgag ataagggtgt cagcctaaaa agctctgcct acaaactagt 13260 gggtaacaca aaggcttttc ttcttgagct gagtctagtg agtccatgac agaagccaag 13320 tgtgcagagg cccccatgac tggagctagg cttgcccagg ccccaatgac aggatcgggt 13380 gtgcacaggt ccccatgaca ggagccaggt gtgtccagac cccacctagt gggcttcatg 13440 agccccttgt agagaaagct ctgcaaatag gcacctagac agagcagagg caagcgtctt 13500 cacagcaggt ccagtctgga gaaggaacat tctcctatat gtctgatttt ccttctaaga 13560 acttgtctag atgacagatc tgaccaagca acactactca gcctccagta gagggattta 13620 teccaggttt cetcagacae tggcagacte teagagetge etcagtggga gaagaagaet 13680 aaggctcaac atgcagcttg gggtgtctcc tcgaagctga acaaggtctc taatggcttt 13740 tgccttccca gggagcaagc tttttccaca caggacatgc tgactatagt agtatcagga 13800 tqtacacacc tqaaagactt catgttcaat ccacttattc accaagggag ccccaagggt 13860 caqqqqaqaa cctqcctqcc caqgattgaa atacaggtaa ctaacttcag ggctggttga 13920 ctctgtctcc tgctgtgcct ggcttcctac ccttgacaca cttcctccat cttccatcag 13980 tccccacctc ttctcactag ggccttgaca tattttcatc ttcctattta gagctttatc 14040 cccatgtact tagttactta tagtaattct aattacactg aagtgaagga aaatagaatg 14100 atagetette ttacaagtga geeccagagg aageecagea ggtettetta ecagagatea 14160 ttactgtgta tcatctctgg accaggcatg acctgagagc atccccattt agtgagaaat 14220 gagacaggag accacataca cattcagacc aaaagagaaa gtcattattg acaggttgac 14280 tctaggaaat ctgagcatgg agatgaaaga gaaagagcag aagaactagt ttgatcaggt 14340 cacagaaagg ttcttacact gagaactaag gtattagaga atcagctgag ccaaggcctt 14400 gggacagggg cagtagcacc tgtctccagg atccctctag ttactgtcta tcctccacag 14460 gcttgtagag gagttcatgc tcctggccaa catggcggtg gcccacaaga tcttccgcac 14520 cttccctgag caggecctgc tgcgccggca tcccccacca cagacgaaga tgctcagtga 14580 cctggtggag ttctgtgacc agatggggct gcccatggat gtcagctctg caggggccct 14640 aaatgtgagt gctagtgggc aggtaatggg aagacctgct tggagaaaag agattaaagc 14700 ctagaagttg ggctggtggt gacttgtctg cctccatgta gccactccct atgtagccag 14760 gtcagtctcc cctgcggtgg agaagatggc atccactagg ggtaggctct attatcaggt 14820 ctgtaccaag ggagactatt caaggtgtag ccacttgcat ggcctctagc aaggactgga 14880 ctgqtccttg ctqagccagg gtaacaggaa gcaaggaatc tttcttagag ggaagcactt 14940 cacatqttcc cttctcaqaq qtaaqcttta tgaqgctgca gaaccagtgt ccttgctcat 15000 cccaccaaaa qqaqatctcc cacccatqtt ccaaqatqqa ggtgggtgtg aagtaggcaa 15060 aggattcctc taataaagag agctggccta ttgtaagcat ggaagatctt aggcccattg 15120 tatgacacag actatggatc acagetetta caccetgeag gtagteaaca tggeecatag 15180 cctgggaacc cctctctacc ttccccaaaa tgggatcaag cctgtttcca aggccaacca 15240 tatctcatac aggtttctgg ggtttacttc tagaaaagcc tgactaagac atttggagat 15300 gacaagtact ctctggcccg gaaggaggtg ctcaccaaca tgtactcccg gcccatgcag 15360 gtaaggaggg gccacaccag cccctgatcc cagtagtacc catagctctg gctggcaagc 15420 accacgtgta catageceae tactgtettg etetgetetg ggatetaetg gatagagagg 15480 cgctgaggaa cactatctgg caagaaaagc tgcagtcaca cctgggacag gcgcactgag 15540 ctccagaaga aatctatcct ctgtgctgaa aagcaggctc catccctcag gagctgtatg 15600 gcctgtggct gctagagacc ccaggcaaga gaaaaggtct ccatctctac tgtagctgca 15660 gtctgcagga gaatcagtct gcttcgagct tgggcccatg ttcccaagca agtgacagct 15720 aggagataga tgggctggct cctagcaggc tgtcacagcc ctccagccta cactgcagtc 15780 tetgeaggge etaageatee ttgggatggg agecatetea gtagattgge aggteaattg 15840 gagctacagg tactaatggg gtcagctgtg ggccccagca cttgccaggg cagtggcagg 15900 ccatttttca agggtcactc tcaacagatt caatctgttc atgagagtca ggtagcctca 15960 gccagccaca gctgatttat ttcctgataa ctcctggctc tactaggaat ggagccatca 16020 gggccgttcg gggacttggc tgcctgttcc ccaccctacc acctacccta gacagtgcac 16080 acaagaccct aggetgtgcc etgtggagtg etgeteceae caggattetg atggeaagga 16140 ctaagtggca agtgacaggg acaggtcagg gcacagcaac agcagcacaa cagtggggag 16200 tgaggcctgg ttcccaagag agctgctgaa acaggacaca agctgtccca gtggtctctg 16260 gccactacag agaagccatg attgttgccc tgcccagaga tagctacact gaccaaggag 16320 gageettgae etetttteet eeteaegetg eetttetgag gaactgagee accaetgaaa 16380 acaaagataa acatgactta ctatgaagac tatgccctct gtccccagca acttgcccca 16440 gatgtagete aagateeage agggggetgt getetgagtt etagggetat gtacatggag 16500 taaccagaaa aggatgtcat ttggccaggg attctggagc tttcaaagaa gtgaacatcc 16560 ttctaggcaa cagctgctga ttccaaggct gtgatggctg aagccagacc tcatctaggt 16620 tgttcctagg ttgcagcggc tcagtggttc ctttggctca ggtctcttag acctgtggat 16680 caccgtggac agttgttcag gagcaaactg atgcaggctg gcaagctaac aaactaccct 16740 cttgactggc atatgctaga gtattgtact gtacttgtac ttgtggctag tgtgaccatc 16800 aactgggaag agatcagagc cagaggaaat atggttggct cagccagaag ctgaggaacc 16860 ttacgggctg ctctcccttg gaggttggca tcttgggctg gccagggaca tgcggcatcc 16920 tcagtttctg cttgtgtctc cagaagacaa ttcacagccc tgggccaaca tggccatatg 16980 ttttcctatc tgcaatcatc ttgacccagg gtgactgctc ggatcctaag gaaaattatt 17040 ccacagcaac teetetgeat catteetggt agggaeteag caaccatagg cettaaggag 17100 gaagagccct tgcacagctg ccctggtggc tagtcccaca gtgctagagg ccacccagca 17160 tectgaggge ttecageete ecatgeecaa cagaggeata getteetgag etgttgegag 17220 cattgecete atgaatggag eceggeagee etaggeatga etageatgea teetgageag 17280 ggaagggctc tggtcattac atgctgtcca tggcagctgc tgagaacccc ttaagtagga 17340 tgaccctggc cccaagaatc tggggctttg atcagctgcc tgaagctgat aggggaggtg 17400 tgtatcaacc ttgccatggg ccaggettgg gtctcagcac ctagccgacc cagccagget 17460 tagtcccact ctccctccag atggcactgt acttctgctc tgggatgctg caggaccagg 17520 agcagtteeg geattatget eteaaegtte eestetacae acaetteace teteceatee 17580

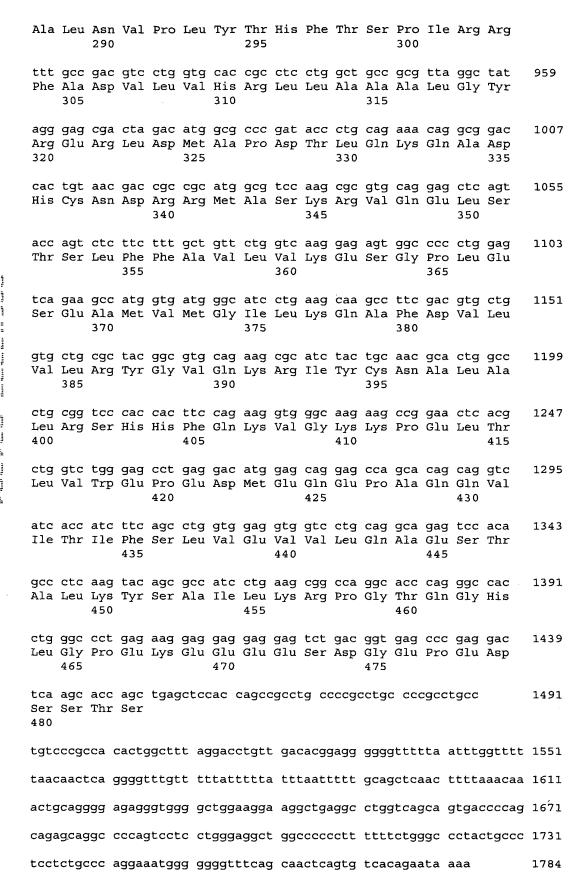
gccgctttgc tgacgtcata gtgcaccgcc tcctggctgc tgctctgggt aagggacatg 17640 actetggeet gggaagaeet ttgetggteg agagttaeee acteteagag taagtgaeea 17700 cattactgtt atcatggaca tgccgaggga cagagaagcc taagtctgaa cactgtcgat 17760 ccacacccag atgatggaag ctttagtgag acttattgca agcgcgggac catatatggt 17820 cccagagect tgectcagea cacaacegte ettatececa tactageaac ectggtegee 17880 ctctcctcca ggctacagtg aacagccaga tgtggagcct gataccctac agaagcaagc 17940 tgaccactgc aatgaccgtc gcatggcttc caaacgtgtg caggagctca gcatcggcct 18000 cttcttcgca gttctagtaa aggtgagtgt ccagcctggc cccttcttct tcccctttcc 18060 ctgtcctccg atgaatggag caccagtgca ggtcctccct gggaggatgc cacgatgcat 18120 tgttcctaca ggagagtggc cccctggagt ccgaagccat ggtgatgggt gtcctgaacc 18180 aagetttega egtgetggtg etgegetttg gggtgeagaa gegeatetae tgeaatgtga 18240 gtatccctgg tatgaatggg aggcctgcac ctacaggcaa aaccaaaccc attttcccgc 18300 ctgtgtctag ttccttgttg gggaaatatt cccctggtcc agaatatccc atgatagttt 18360 cacaggtgta aatggtggga ttcaactgag ctcccttctg tccctggcca ttagctatgc 18420 agggcccaca gactgcatcc tatagcagtg agtttcactg gcatgtggca agaaagggtc 18480 cagacccctg aacccaagta ggcctgccca ggacagggcc tcaggccaag ggtcaagtct 18540 gaactettee ttaaaageee aggeacteag aacataacea ggatggeagg gtgtgggaee 18600 tgtgatgttc ttatagaaac atgcagaagg ggaggccaga gggtagccag cactgctctg 18660 gacactgtgt ccccaaacag aaacaagagg cccatcctgc cttggcttct tccctggatg 18720 acagtttatt caaagtcctc ttggtgcctt ctgtaatgtc acttgggggg ctttgcttta 18780 gctgctctgt ggtcaccaag tcaccacctg gctcctaccc ctggctttga acttcttaca 18840 tacacttggg gaagtgtgga accctgcact ggaagagaca caggattcat gaaagaggca 18900 gaacaggaaa gggccaagtg cagctggaac taccagacac ctgtagttac ctggctctca 18960 gcctggtggt caggtctatc accaacagcc taggcagatc tcttctcttt gctacagtca 19020 ccaccctccc acattgtccc ttggaattgg gtcaccttca ggttctactt tgaccaaagg 19080 tgacttagca gaacctccta aatctggctg aggtggacca aggatagggg gctgggggat 19140 gtctctgtcc aagcaggcag ctacagtaag gcagccggta caaagctccc tccagccagt 19200 cagaaatagg caggcagggc agaagaggtg tctgaagccc atagcctgag gctccggtgt 19260 gtccccctgc ccccaggcac tggccctgcg atcctacagc ttccagaagg tggggaagaa 19320 gccagagctc actcttgttt gggagcctga tgaccttgaa gaggagccaa cacagcaggt 19380 cagteccetg etgtgtecet aageetaeet etgteteaaa egtgtgeeee taggteetea 19440 tctgccctca tttctcccca gcaccatagg ttcccctgtg ggattccacc aagccctggc 19500 ttagactgcc aggttctata tgggaacacc cactatggca gtggttctca accttcctga 19560 tgcagcgacc cttaacacag ttcctcatgc tgtggtgaca cccttccccc agccattaaa 19620 ttattttcgt tgctacttca taactataag tttgctgctg ttataaatca aatgtaaata 19680 tttttggaga tagaggcaaa gggtctcgaa cgacaggttg gggactgctg ctctataggt 19740 agataggtgc tattcctctc ccctgaacag aacttttcag aaattttgag aagctgataa 19800 aagettettt tateeetett gtteeaaagg etggeeeage ceagetegge eeggeeeage 19860 ctgttttctt gctcctcgtg aatggtcact gaataacaaa tgtctacata gtgccattta 19920 gcctactggt tttccccaga cccaatgaat cccatttaca gataggcgat agaggctcgg 19980 gaagttaagt gagceteagt ggteagttgg etttgattge aggeeeteae etgeeetgte 20040 ctctcctgtt cctggctctg ctacaggtca tcaccatctt cagcctggtg gatgtggtcc 20100 tgcaggcaga ggccacagcc ctcaagtaca gtgctatcct gaagcgacca ggcctggaga 20160 aggegtetga tgaggageet gaggaetgaa tgetageeca ageeaggeet gtgeetgeee 20220 taccctgctg gcttttagga ataggacctt ttgacaccaa aggggatttt taatttggtt 20280 tttaacaact caggggtttg tttttatttt tatttttcct tttattttac ttttgcagct 20340 tgetteeetg ageagagagg atceeagtee teetgggeag geageeeege ttetaceagg 20460 cgacccactg cccttccctg cccaggaaat ggggggtttc agcaaatcag tgtcatggaa 20520 taaaatcaag tgtgaattgc tgtctgtgta gatgccatgg gcaagcatgg cagctgggtg 20580 gcctgtcacc gagggcaagg ggctccctag aatccacctc acagctgagc tggggtcatc 20640 ageteaggae etteetgeea geteeagggt gatteaegag eeatgtgtgg cagattgatg 20700 ctgcagcctc cttctagctg attaaaaatg taattagtat gcacagtagg gagctgccag 20760 teaceetgtg catgtggetg tggeeeteee teecegeeet teetetetgt tgeeageeea 20820 tgggatgtgg ggaggtggga ctaccacctc tcttcttata tatcataggc caaagctccc 20880 aggagecetg tteacageta tgetatgagt aggtacetea atacetgeag ttteaaacat 20940 gtaccctaaa aggtaaaggc agaccttcca gagggcagga ggacttcaaa acagatccta 21000 cctgacccag ccacctgctt agcatcccaa gtactagcaa ttcctaccct tctgagcact 21060 gggcagcete ttecetaggg aactgggcae agtgtateet cettteacea gaetggaata 21120 gtatgaattg gcttcaaaag caactagaat ctaggatgaa aaccaaagca accaaggccc 21180 tgttccccag tgctgttccc tgtggcatca ggattaacag acccatctga tatggttatg 21240 gtgattttct tcaaaaaaga ttctgtggag tcccctggca ggttccttgc agtgagtgac 21300 tggcacagct gcaaggatat cacagcccta ggatgggctg ttgtctgagg agagccacag 21360

acacgeecca cetgeectgg geteettgte ageeteacae ageetteage tgeetgteet 21420 cccacccctt aggtctccct tctgctccca ttcccagacc agcatatctg gataggcaga 21480 gcagtgatgg atggtggttt agtatctggg taaagaagac tctggtgctt tgccaatcct 21540 qqatctctaq actaaaqqct catcccacaa atctgaggag gagctagctt ctctgctggg 21600 ccaaacccgg gcttccaaga cctcctttca ctgcctcctt cagaatcctt aaggaagctg 21660 tggctcgagt actgggttct ctcaagacac agaggtggct gagacacggc ctccccaacc 21720 ctcgtgagga acagcttacc agtcagtaag gaaagttttt gcagagtgaa cgtgcttagg 21780 aggcaggcac tggactagaa acttctataa caggcttgct ccaccctcag gttggacatc 21840 atgttactga gaactctgag ccatagcagt cctgggttgc cctaacctgt ctgacaaatg 21900 gaagteteag gtetecatet gaggtggtge ageeaggeeg eeetggeeag gaettgagee 21960 acctgtcctc tgttgcctcc cagtggctct gtcatcttcc cacagcacca gctgagtcac 22020 ttctctttgt gtttgttcac ccagcactga gtcagagaac tgatagaacg tgtgtccaca 22080 caccactcag tgtggcagtt ggcaccgaac actaagggca ctgctggcag aagagatgac 22140 aagaaataaa cgaagtactc actcatcagc tatccaagac acctgcctgc actataggct 22200 aaagcacagg gcacagagca gctcactggc ttttcctcag tggcctgtca ggttcacatg 22260 gaaggaagac agacacaatc tcactctgat tggggtctca aaaagctcag aagcaggcag 22320 tatgttccca ggggaaaatg gagcaggttg tgggtccagc atggatgaga aagttaagta 22380 ttaattaatg gttgtaacct gccctcctgg ggagagaggc tgacaccctg cacagtccta 22440 cttagcaaag agccttggaa aggacttcag tgggcccagg atggcagtcc accggaagct 22500 ggagcacagc acactggagg tatggtaaga gggagctggt gccaggcaga ggcatcccag 22560 atgcataccg caacagccag tgaggatacc cactgcacca ccatgccagc tagccactaa 22620 agcagccagt gagggcagtc caggtgagag gaggaaggcc tgagaggaga aaaaaaatat 22680 ccaaaatcct ggggtgggtg gtgtcccaaa actgaggcag cataggcaca gtgggagcag 22740 cagagacetg cagtggetee tgetgggaat ggggeaggee tgtgaaggag agagggetga 22800 gccatagggc actggtgact cagtgagatg gaaagaggga ccaagtgtag aacagctgga 22860 ccatgagaag agagcatgca gggcagttca agaaccttag aagaggccat gtgggcagag 22920 tggggctcca gaagagggta ttgcagtcaa tgggagctag gagcctggag ccagatctcc 22980 ctctgtgaag gttattgatt atcagtttct gaaggataca aaacatccac tctcactacc 23040 tccccaagac cagcaaaggc accaatgagc ttgtgttcag ggatccattg tgaggggaaa 23100 tgggaaaata aaggaggacg ttaccctggt agctgagagt gagccagcag tccctgttag 23160 actggagaaa ggcaggtacg aggccatcca caaagaatgc tgaagcaccg agctgcagta 23220 gaagtcagtg ttgccactgt agtaaataaa ctgacctctt cccacaccag caggcaagag 23340 agcgatcatc ggagagtcac caggcctggt agaatctcct gtgataggac cccatgagat 23400 gcagcagagg gctgctgcag gatccagtca gccctcaggc cttcagcagc caggcaggag 23460 attgaaaaca tetteteegg ggeeeteetg teeecacatg aaatacaaac ttggeageag 23520 agtttcccca gtgagatccc agccaggctt ctcatgggga atcagcctgc caagtcccta 23580 gggtacttgg gcttctagtc actttgtgag tcctatctgt aaataaagat aaccagggaa 23640 acttcctttt aaaaggaaaa taggtcctat ggagaaaaca gatcacacag agaaaatgaa 23700 gttatcactg acattttcaa ggaaatgaga gccatggaaa aacaaggact agatggctag 23760 acaccaaaga aagggctggt gatgtagccc agccagtaaa ggtaccaggt gctaaacctg 23820 ccaacacggg ttcagtccca gggctcatag caagagcagc caactgtggt tgctatgtaa 23880 tgtccataag gcgtctttgg agtgttcaaa gtatctaagc tcccatgaag gccatccagc 23940 tggctgcttg gctaatatcc ttaaacatcc aaggttccag agaaggatat agttacagtt 24000 aaatccccct ggctcacaac atcttaactt atttgaaaaa aaaaatatct gagcatggca 24060 gctcacacct gaaatctcag catttgggag cctgaggcag gagggttgcc atgcattgga 24120 ggccaatctg ggttacacag taaatactaa tcagactacg tacaagacta tgtagatata 24180 ctatgtagca agactgtcag aaaggaaaaa taaacattaa agaggtaatt agagtaaacg 24240 cccaccatta actgtaatgg tatttaatag tgttcaaccc tcaaccaaat gtccctggga 24300 ggagttggat tattttatgt ctcatacacc taaacagtag catcagtgcg ctcaggattg 24360 aggagcaggc cagcaccacc aggggtgaga ggcatccgat ctagaagatc cctgcctgag 24420 gtageeggta agtgaagtgg eteagagaaa gteaagteae ggacagaete caagattaga 24480 ctgacactaa gtgcactgaa aacaacccta tctgacagta aggaacgtat tgggtatgag 24540 tggggaagca agtacaagaa agaaaagcct ttccctggtc tttcacctgg cacatctggc 24600 aacagcagta catcctaaga taaacactga gtgagaatct acaaactgct ctggggccat 24660 attgagagga tgaggagatg ggacacatga gtagccagtt cactettcag tggaaggttc 24720 tggggagcta aaggtggctg cagattcatt gcctacccac caccaccaca caccctgttc 24780 ttgtccttcc tcttgaatca gagcagagtc ttcagctgct gagctcagat acagcggaag 24840 tgatgttgca ctgtctccgg ccatgctgag agtgccacag cagagctgtg agaaagtttg 24900 ggctccctcg tactccagct cagaggcatc ttagagatgc atgcccaacc cccacagaac 24960 cacccagtgg tggccttgtg gaggaaacac aaagtctcca gaagacccct tccaaattac 25020 acatttctat cagctttaaa aaaaaatgtt ggttgttcag ggatagttca tgacataata 25080 ttagcagaaa atgtcagtaa atacagctga aaactggaaa tgaagggctg gagagatggc 25140 tcagcagtta agagcactga ctgcacttct gaaggtcctg agttcaaatc tcagcaacca 25200 catggtqqct tcacaaccat ctgtaatgag atctgatgcc ctcttctggt gtgtctgaag 25260 acagctagtg ttcttacata taataataaa taaatctttg ggccagagtg agtggggcca 25320 gagcaagtgg ggctggagtg agcagaggtc ctgagttcaa ttcccatcaa ccacatgatg 25380 gcccacacca tetgtteage tacagtetae teatatacat aaaataaate ttaataaaaa 25440 actgaaaaag aagaaatggt tgttttcatt tgtctgttat tctgagaggt gtggttttta 25500 caaatagtgg taactataaa aaatttaaaa cccatgcaga ttgggggtgg actagggaaa 25560 tggctcagta aatcaagtgc tttccacaca caggagatgc actggagctc tgatcctctg 25620 aacteetaca caageaggeg geeetggeag etgeetgaca teecegeact cagaggeeet 25680 ggtgaactga ctagctagac tagcgggacc cgtgagctct gggctcagac agagatcctg 25740 actatagaaa gtagaaatca accagggaag gggtctgcct tcaactttgg gatgccacat 25800 acacacaca acacacacta aataccaaga ggggacgtgg ttgcctccaa gatggaaaat 25920 gcatctagga gcatgaagtg ctctcccatt ttgttttaat aaacctgcca gatccatttg 25980 acactttaca tctgtgtata atttcaattt aaaaaactaa aagtaggggg gaaggctgtt 26040 tatatttagc cagaatggat ccacaattgg tctaaaagct ttcctgtaca ttcagcaagg 26100 agtgtattaa acaatccatt attctagtaa ctaagataaa atccctgctg acaggcaccc 26160 tggtattccc agaccattaa aatgcttcca taaagtctgc ttaaagacac aggtagcagg 26220 ccaggtggtg acacatectg getgeeteag cagacettge aggtetaggt gtggageeca 26280 gagtgtgggg cagccctggg gcaacacagg cagacctctg gaggcctgcg gaggtggcat 26340 ggcagacgac actgtaggca gcttgcagaa gagctggcca ggggccttaa aggacatcag 26400 ctaaaggeet etgtggaeeg aaageaeagg ettgagggat tatttggagt eggggttggg 26460 atgaaaqqaa ttgacacaga ttaaagaatc aactccactc tggtgggtgc cagaacaaag 26520 gtgatgcttt gtataacgat gaagaaagtt ctagaactag ggggcagctc catgatagaa 26580 cacctgctta gcaggtaaaa agagtcaggt tcagtctttg gcacaacccc cttaagaagg 26640 aaggttctag agaaaggggt gttctggacc tgagaaaatt agcttgaatt tgcatataag 26700 taaattatgt ttataagttg aaactettae egtggeeetg gagagtgget caeteagtta 26760 gttagctgct cttccagaag actcaggttt gagtccagtg actcacagct atccataact 26820 ccagtcccac agagatetga taacetetgg cetectcagg caegcaccag gcacacatgt 26880 gatacacaga catacataca ggcataccat gaaaataaat tttaaagaat taactgtaac 26940 caggtctgtt agcacatccc tgtaatccca gctgctcaaa gggctgaggc agtaggagag 27000 caagttcaag totggotttg gotacagago otgtgagtta aagcocaggo aacttagcaa 27060 gacccagtct caaaacagaa attataggca ggaggtacct ggagccatag ctgaggatgg 27120 gtactggcca ggcctgtgtg agttccccaa gttctattct cattcctgaa aaaaaaaaa 27180 caacaaaaaa aaaaacataa gtggtcagtt aaaccttagg ataagataat ctctttgaac 27240 ctgctctgcc tttttgtgag cttttatgat tatcaagggt ttctttctct agtatataaa 27300 gccatcttag ggggtaagat ctatttaagt catttatttt acttaaaacg gtcattttac 27360 tcaagcaggt tcatgaactt cactgtgttc cacagtgttc ctaaattgta cagttctgga 27420 aagcagttag ccaaatacca agaaaatgaa tgcagaatag agtgaggaac aaaggcggcc 27480 cttcagcata ttttacctta atagattttc cagctaataa gactgctgct ggagggagag 27540 tgtcctcccg gtgctcctga caccaagtca cagaagaaat taccgaatgc ggcactggac 27600 acctaggact ttgcattcct ccatgcccag agaagcaggt atcactcaga aggatgacag 27660 gggctgggga ggtgactcag cagataaggc acttccacaa aagcctgatg acctgagttc 27720 aatccccatc acccactttt tttttttaaa gagaggaagg agagaactga ctgcagttgc 27780 cctctgactt ccatgtgctc cccaaggcga gcaacacac acatcataca catcacaata 27840 atacattttt aaaggatgac tttgagctac acctgccaac tgtccctgat gctgccacca 27900 ctacaactag acagaggagg tcttgcctgg tgggtaagtg aacagtcaag ggtgcccacg 27960 gagagccact tetgecagge ceaeteetga acteetaggt ceteaegge teagaccete 28020 ttgcctccgc tgaagctgca gaagggactc agctgtgcac tgtctcctcc cccagggacc 28080 atggggcgtg gtgagggaaa ggggactgtc tcttgccttg gtggtagatc agtctccttc 28140 ctgttctcac accagagccc agggattgac tcaggtgatg agagagtgga gaaaggatct 28200 acacccagcc cccctctaag accccatagc agccccagga cataagtaca gaagagctgg 28260 gctgggctat gcatttgctt tatacatttg agtcaggaag gtgggcttat ggtacacagc 28320 tgagcaagga ggcagattta gctcatcttt ataagaggtc tctgtagggg agcagtctta 28380 ggctgcagtt atcccagagg aggaagctga tagcttctac atggactgtt aaaatttgca 28440 ttcagaccag ggaaaggctt tgccacccct ctgagcttca ctggggaagg cttcgccact 28500 ccatgggcct gatgcgttgg aatccatgac agctcagccc atgtcaacaa cacacattca 28560 cttagggttt catctgctcc tttcatgtaa cacaaggctg cttctgctac gtgtggggat 28620 ttggagagta tatttcttgc tggaaatgaa tgatcaaagc aaggccccac ctcctaggct 28680 ctatcaggat agaagggtca ctaccagaat gagccacctc ctcactgacg gttggctcca 28740 cttgcaggcc ttccaggatt ccaagacttg gttctttgtt ctgaagctca gggtatagct 28800 tectetacet ceacacacag eccetaacee tteagtgeat agtgaaceae taagatetee 28860 cactatgtcc ccatagcagc cctggagtac aggtcctgtc tcttgcccat tctcaggtga 28920 gagaacctag gctcagagag atgacacttc agaagataat cagaaaatgg tggaggtgat 28980 tgggagctca gatccaaaat gcactgcatt tctttattag atatttttaa ttctaacggt 29040 gtacctgggt gtttgggctg catgtgtgtc tgtgcatatc accgctgtgc ctgctgccca 29100 cagaagccag aagagggtgt tggatttctt tctttcaatt agtacttctc aaaattcaac 29160 tattcatgca tcactttaat gattttttt tttttgccat agccacataa tggcctgtgg 29220 tcatatttat ttaatgtttt tcattaaaca agcttaggcc tttccttgaa ataattagaa 29280 aggaaaactt acagttacca aaaaatagag ggccagctgg gggtttagca agagttggta 29340 cagtgttcac ctcgtatgca caaagccctg gcttccaccc ccagtaccca gagcttggga 29400 gaggaaaggc aggatcaaga gttcaaggac atggccaggc atggtggggc atgcctttaa 29460 tcccagaggc agacagatct atgtgagttt gcattcatcc tggtctgcaa agtgagtctt 29520 ggacagccag ggctctgtta catagagaaa ccctgtatcg aaaaataaaa aaacaaacaa 29580 acaacaacag caaaagagct taaggtcatc tctggctgta tagcaagttt gagcccggct 29640 gggctataca agaccatctt aagagggagg aggaagggga agaaaaagag gaaacaagaa 29700 aggagataaa agaaggtggg gggagtaacc agaacgcatt atataaatgc atgaaattgt 29760 caaagaacta agttaattaa aaagcaggaa gaccaccatc accagcctcg agtagaaggc 29820 agctgtgtat tctaagcctg caaatagcag tgtgagtctt tgctccgggg ctctgcttca 29880 aaagagatgg taaagttagt acaatgttag agaatttcag gaaccaactg cgatcctttc 29940 ctcgatatca tcaaaggggt ggagagagag accaacaacg ctccatagca caggcccatc 30000 actcatgtgc ctgagaagct ggagccaagg atctgtctct tcaagactcc atctcaataa 30060 tggttcagtg acattttatg cccattggtg atagctaaac tagccccatt tcacctaaaa 30120 gcccacacct ggcaccgtag tttgtcctgt cttgcaaaaa atgccggtca agatggagat 30180 aagaaccgtg gcaggaacag atgcatctga tctcagtcac actgccaacc tattccttcc 30240 teetgaggea geteatgetg aggagtgetg getageacea gtggtacaca getgaagace 30300 atgactegee tteteccaga atteccagea agaggeattg ageceaataa gtecceete 30360 cagccatgac taatttttga cagtgtccat cttctgatag cccttgaagg taactacagc 30420 ttctgtgagt ttatgattgt gatgactgtg gcattgtcaa aggatggcat ttgcaagtcc 30480 tetetgeett etggettgea ttttetette tteeteece acettgttee ecaageetta 30540 ggagagtggc atctgtgtct tgttcagagc tgagcactca gccaccattt cttctcagtg 30600 cctgggcctc acatgcagtc cttgggcagt ggttggttgg tccagtaaca aataggcatg 30660 tettgeetag eaggtettat etagetetgg tgggttteea ageatgtage aagaagagte 30720 tgcactgttt tgggagtctc tggagcatcc ctgaccaatg actgacatgg aagtgctcca 30780 aacctcctqc ttctqqqqtt tctqtttaqt aacccacaqc ctctagqaac agtgttatcc 30840 agacatgtag ggtatctctc ttctaatgtg tgcgtgtgtg tgtgtgtgtg tgtgtgtgtg 30900 tgtgtataat tgtgctacaa tatagtaagt ttacacactt gttttggtta accacccca 30960 ccccatcccg tcctccccac ttctttctct aattaaatct ttccactcca aagagcatta 31020 ctgctattgc agagaacatg ggtttgcttc ccagaaccca cttggcagct tacagccata 31080 gtaactacag ttctggggag tccagtaccc ccttctggcc cctgcctgca ccagatacac 31140 acacacaca acacacaca acacacacaca acacacatat catacactta gatacctgca 31200 ggcaagacat ttgtacatat aaactaaaaa ctaaatctta aacaaaaaaa aaatttccac 31260 tcaaagtctt caccctctct gttttcactt tatctgtgtc ttgctatccc ttctccctta 31320 aagggaagaa ggacagaggg aggagggagg gaggaggaag ggagagaggg agagagaaa 31380 agagagagac agacteetag ttteetgget tecacaagtg etceaaggta ageatgeata 31440 actaaagaat caaagctaag taagggctgg agagatggtt cagtggttaa gagcaatgac 31500 tgctcttcca aaggtcctga gttcagttcc cacatggtgg ctcacaacca tctgtactga 31560 gatctggtgc cctcttctgg cctccaggta tacatgcagg agaaatgctg tatacatgat 31620 aaataaatat ttacaaaaaa aqaatcaaaq ctaaqaqcca tatqtaaqga tgtaacagca 31680 tctttctggg cctgagcaac actatatata tttttccagt tccatatgtt tacctatgaa 31740 taaaattcat aagtatatat gctttgttaa aaataacaaa acatttcagg atagccaggg 31800 caaatccaca agcagtccaa tcaatactga aacgctggtt ttgcaagcta ccggggtttt 31920 aatcatctta acgtttcttt ctctttccat ctttccactt ctttcctgcc cttcttcagc 31980 ttqagctttc ctcgccactg acgtcagcct tgtcctcctc acatctctct tcccactgca 32040 ggcctcatcc tcgaaccttc ctctcaccct tctcaggctc ctctcccctc accatatcac 32100 ccacagcatc accettetge ageccagtea ggacetteet ggteetetaa agteagetgg 32160 gggaggggct tgcaggcctc aggttagtcc tagttaaaca gagctagcct tttcagacaa 32220 ctgatctcct tcaaaagacc caactactgc cttccgtttc cccgtaagtt cagatgttaa 32280 cctgtccaga ccttcaaaag tcctactgcc tctgagcttg agctttttca gtgtgggtaa 32340 tggggaattt tggaactgaa attaagtcta cacttaacaa aggaaggaac tcttcatcta 32400 caaattcagc caccagccag cettteeggt ttecateatt teatttggat catctagacc 32460 aagttotgga ataattgott aggtottooc coaccoccac coccaccoca cocctggoot 32520 ggtagatocc cetetecaca tecetgtttt cettgttact tetetteaga tttagttttc 32580 cgtgaggcaa gagtggagaa gggagagatg tactagcctg tgctcctgtg tcacactctt 32640 gctactcagt tccactctta aaatttctgg tcccagagga atagagatga cctcacatgc 32700

aaccctgcct tgactacttt tctattgctc taaggaggca acatggccac agcaacttgt 32760 aaaagcattt aatttggggt tgacagtttc tcagaggttg aatccatgac catcatggtg 32820 ggagcatacc cggaggcagg catggtggac aggcagtcgt gggatggctc tggagctgtt 32880 gcagagcact tatttgctga ttgaaagctc aaagcctacc cccagtgaca cacctcctcc 32940 aacagggcca caccccctaa tccttctcaa acagttccac caagtattca aatatatgag 33000 cctatagggg ccattctcat tcaaacccca ccccacccc cgtggcccta ctaagggcat 33060 cagatagggc ctatggaaaa gttataaacc ctctcaccac cactctgggt tccagcaacc 33120 caaggccacc attttctact cttgcttaac caacaccacc caggatctct cagcctcagc 33180 ctggaatgag ggaaccctct tgtctctttt cattcaactc cgtattcttc cttcattcca 33240 cccatggatg gaaagattca ccccetccac tgtagagtaa cacacacgta tgacaagcca 33300 cttcactgcc ctgcatctta cttctgctct gaagttctgt cagccaaaac gtattgagca 33360 ctgaagactg tcagttgctg ctttgtgtgg tggttacaag ttaaggtccg actgtagctg 33420 tetgettget ggagagaetg ggaaceagta gttgettage ceatgggget ggagaeetca 33480 gcagttccag tgtggttctg aggagaaccc attccagcag cagcagaggt agccacagga 33540 tagcttgact cacaagactc atgaactcaa gaagaggaga gatgaacttg taagcagggt 33600 atgtgagete acacetgage ggtgaaggea ageaggtaag aagagettee eeteggaeet 33660 tetgtetggg ceatetacae teagatggge etcecaette atttactaga ageaageaaa 33720 teceteteag gegtgetgag gttaacetaa teggeataae geeteatagg tgtaeecaga 33780 gcttgtcccg tgatactaga tcctgtcagg ttgaaaatgt taaccatctc aagggtcgta 33840 cacattecaa aaaggeactg tgttggetat tettggttgt caaettgaet acatetggaa 33900 ttaactaaaa cccaagtgac tgagtatgcc tgggagggag attttcttaa gtcatttgaa 33960 qtgggaaqac ccacttttaa tccagaactt ctaaggtggg cagattcacc tttaatcagc 34020 ctatttcaat gacatggagg atggaagttt gttctctttg cctgctagcc cttgttggca 34080 aqtccatcac ttcactqaac caaaqcctqt aaggcattct tcctttgttt gttgggacag 34140 ggtttcctgt agccctggct atcctggtat tcagtctgta aaccaggctg gccttgaact 34200 cagagatcca agtgtctctg cttcccaagt gctgggatca aaggtctgaa ccactaataa 34260 agggagtgag agagagagtc attctgtaaa ttctgttcct ctgagaaccc tgactaataa 34380 agetgeagae tgettagtat cetttttgtt etetttgggg acacacacaa atgagtgaac 34440 ggactacagt gggcaacatt cttctatgtc tggtggctgc cctggggctg tttagtccac 34500 ccttgtgtga ggactctttt gctctcaagt gctggcatct gacctgtgcc cttttaaatc 34560 tgttgctaat tttgtctctg gggttccaag tagagacttt tcagtgatct ttcctcatga 34620 tgaaaatggg tgatctgtta ttggaagtcc ttggcctaag caagctctga tttaatctaa 34680 ctatatcatg tgctcttcta atctattgct ccgggtccct gagcattgct gtactcattc 34740 atgggtcatt ttgtcattaa tctggctcaa tccatgttca caatgatgat ttgataaagg 34800 ctgaaaatgt gaagtggatg gtaacagttc tgtgccctgg attccaacaa agagatgcat 34860 gctcctccag cccactctgg gtgactctag gggacggaga caagggtctt acagagatgt 34920 cagagtatet gacteettga cagetagtgg ceteacaggg agacteatea ggggteaatg 34980 ctctttctgg taagatgaac tccagctcac cctgcatctt gatctgtcca cactgcttgg 35040 tgttgagact tcctgtagcc atgtaaagtg ggacatctgg cctactggtg attctctaag 35100 aaggaatttc caccaagcag gacacctgaa cactttctta acattgactc ttactttggc 35160 taccaaaaga agcctttgag ccctatgtgg tagcacagac ctgcaatccc agtactcagg 35220 aggtagatga ggtggatctg gagttctagg tcatccttgg ttgcatagca agtttatatt 35280 tgagcttggc cttggctgca tgaaaccctt gtcttccagg agacaaaaac aaaaacaggc 35340 aaattteeet taagaagete acaeteegee tateeaetgt gettgeette tteeeaatea 35400 ctatggcctc ctctcctcca ttaacgccca tgcttaaagg gtcttctaaa aatgtctttt 35460 agtaaactcc aattctacta catttaaaga agggggaagg tgagccccac atgctacacc 35520 ccacagttcc agggtgctag gcttccggct gggggctgcc tcttggtact gccttgccct 35580 ggaatgtcag ttcagctaaa ggcctcacac aaaagatgaa agccctgagt cctcttactg 35640 cttcttagca cacaagcagt ttccttcact cccctaggtc ttagcaggcc ttcatcttca 35700 etecetecet decteceted ettectecet eteteteted eteteteted etceetetet 35820 tettteeett tttgteeett eatgagaaaa ageatatttg taaateeeaa tttaaaatat 35940 aaataaacga aaacagtaag totcaaccaa atgaggoota aatcagooot ggaagattag 36000 tacctgtttc tactcaagtt aataatttac tctgtgtccc tctgtgcatg cttggcttca 36060 acagaggate tttaacatgg gatgcaactt egecagagag etteagttet eaggaggeat 36120 qtqqacatcg tgqaggttga ggaggggcag atggatgctg ggaagcaaat ggaaagcctg 36180 aggttecaag teaaatetgt gaeteaegea gtaaggaggt ttgagetggg getgeecaag 36240 ggaggagggc tactacaggc aatgattaag atttatgtat ttattttatg tatgagtaca 36300 ctgtcgttgt ataggtggtt gtgagccttc atgtggttgt tgggaattga atttaggacc 36360 teggeteact etgateaace eegetegtte eageceaaag atttatttat tattatacat 36420 aagtacactg tagctgactt cagacacacc agaagagggc atcagatctc attacgggtg 36480 gttatgaacc accttgtggc tgctgggatt tgaactcagg accttctgaa gagaagtccg 36540 tgctcttacc cactgagcca tctcaccacc cccttaaatt gttattttta aaactatatg 36600 aaataaactt taccatctaa atggggaggg gtgaccagtc tccgcacata ggaggtataa 36660 gggcaggaag atcagatctt aaaggtcagc ctacatgaga ccctgtctca taaaaaccaa 36720 gtaattaata atagcaatta ataattaata ataataggac agcagtagca ctatttggtt 36780 gctggggata cagctctagt agaacactta gccaaagggt cctaaattca atgttgagga 36840 cagccaaaaa taaaataaaa agttccatgt tgttccccca cacacacttt ttttttttt 36900 tgaatgactc tcactatgta gccctgcctg gtctgcaatg tactatgtag cctaggctag 36960 cctcatactc aaaagagggc tagcctgcca ctacctctgc ctctagagta ctagaattat 37020 cagcatgete aggeacactg ggtettgttt gtttttttga gacaagatet catgaateec 37080 ccactggcct cagattctcc atgtagtcaa cgataatctt gaatttatac tggaaaatgg 37140 tagcaatctg gagagtaaca agacaggagc tgactgtgtg tatgtagccc aggatgacct 37200 tgaagcctgc cttggcctac agagcgctgg gactataggg gtatcccact gtgcttgcct 37260 gcctctatgt aaaggtggaa cgaatttecc ctgtgcctgt ggaccacgtt tctctgaccc 37320 actcatccac cagtgggggt ttggcttgac cccacatctc ttggccactg gggatgatct 37380 gaacccagtg cattettete aaaatacact gaggtgggat cattggatca cagacgttet 37440 tagageetag cetaceeect ggggetacag gaageteaca gtttetgttg gttgattggt 37500 tggtttgccc ctccccaaac ccctgccacc tccccccaac ctgggtttct ctctgtggct 37560 ctcttgatgt cttcaaactc actctgtaaa ccaggetgac cetgacctca gagetetgec 37620 tgtctctgcc tccctagtgt tgggattaaa gacatgtacc atcggctata cctacagacg 37680 tgctcaaggt atgtacagag cactcaccct ggcatccctt cacctgccta agagactaag 37740 gatcagaagt aaaccctacc tgcttctctg gaagattcag gttttcctca gggtactgca 37800 gcctctcaac ctagcatggt ctgggcctta tccttacgaa tgtacactca aacacaaaga 37860 caaggetete ecageetgee etaataaett tttteaceaa acaggteatg agteaatggt 37920 gccccgatat tgtctaggca atagtcattc tgggactaca ggccttggta cccaacatga 37980 ctccctcaaa gccaagattg tgagcatgtc actgaggcca ctctgtgagc ttgtttccat 38040 gtcaacggag ctcatgatgt cagaaggctg aatccagacc ctgcacccag gctgtgtgtt 38100 tccagctcca ccccagagca tatcccagtc cagctggctc tttggaacca ttaaagagtg 38160 ataggtgctg actatgtgtg cagagagtga tcctagcagc acaggacaca aatcctcacc 38220 ctggggaaag cagccttcaa cctctcaccc ttaaggggaa gggcaaccat ggaacagcat 38280 ctgtcagccc tccctcacaa cccccaggc tggcctagcc acaccctgcc acttctatcc 38340 agggagggac actgagttet teaageaaga actgtteeec atetaaggee ateceeteet 38460 ccagecccag ctatgcaggg agectggetg etgetgetge tgggeeteag getteagetg 38520 teetttggtg teatteeagg taaggagget eeectaactg ettgteecca etcacaagca 38580 cageetteca etgacacetg ceteeggtet ecceettgge cagtggagga gaagaacteg 38640 gccttctgga atcaaaaggc gaagaaggcc ctggatgttg ccaaaaagct gcagcccatt 38700 cagacatcag ccaggaacct catcatcttc ctgggagaca gtgagtgtgt gagcacggcc 38760 tggccacct ggggcccct gagctccagg catccattga tgtgtccagg aaagcctggt 38820 gttcagatcg aaccagattc tgtttttgta gggttggggg tgcccacggt gacagccacc 38880 38886 aggatc

```
<210> 13
<211> 1784
<212> DNA
<213> Homo sapiens
<220>
<221> CDS
<222> (3)..(1451)
<400> 13
gc aac ttc aaa gtg gga gtt cac att gct gac gtg agt tac ttt gtt
                                                                   47
   Asn Phe Lys Val Gly Val His Ile Ala Asp Val Ser Tyr Phe Val
                                        10
ccg gag gga tct gat ctg gat aaa gtg gct gcc gag agg gct aca agc
Pro Glu Gly Ser Asp Leu Asp Lys Val Ala Ala Glu Arg Ala Thr Ser
                 20
                                     25
gtc tac ttg gtt caa aag gtg gtc ccc atg ctt ccc agg ctg ctg tgt
Val Tyr Leu Val Gln Lys Val Val Pro Met Leu Pro Arg Leu Leu Cys
```

gag gag ctg tgc agc ctc aac ccc atg tcc gac aag ctg acc ttc tct Glu Glu Leu Cys Ser Leu Asn Pro Met Ser Asp Lys Leu Thr Phe Ser 50 gtg atc tgg aca ctg act cca gag ggc aag atc ctt gat gaa tgg ttt Val Ile Trp Thr Leu Thr Pro Glu Gly Lys Ile Leu Asp Glu Trp Phe 65 ggc cgg acc atc atc cgc tcc tgc acc aaa ctt agc tac gag cat gca 287 Gly Arg Thr Ile Ile Arg Ser Cys Thr Lys Leu Ser Tyr Glu His Ala 80 cag agc atg att gaa agc cca act gag aaa atc cct gcg aaa gag ctg Gln Ser Met Ile Glu Ser Pro Thr Glu Lys Ile Pro Ala Lys Glu Leu 100 ccc ccc att tcc cca gag cat agc agc gag gag gta cac cag gcc gtc Pro Pro Ile Ser Pro Glu His Ser Ser Glu Glu Val His Gln Ala Val ttg aat ctc cac gga att gcc aag cag tta cgc cag cag cgc ttt gtg 431 Leu Asn Leu His Gly Ile Ala Lys Gln Leu Arg Gln Gln Arg Phe Val gac ggc gca ctt cgt ttg gat cag cta aag ctt gct ttc act ctg gac 479 Asp Gly Ala Leu Arg Leu Asp Gln Leu Lys Leu Ala Phe Thr Leu Asp 150 cac gag acc gga ttg cct caa gga tgt cat atc tat gag tac cgc gag 527 His Glu Thr Gly Leu Pro Gln Gly Cys His Ile Tyr Glu Tyr Arg Glu agc aac aag ctc gtg gag gag ttc atg ctc ttg gcc aac atg gca gtg Ser Asn Lys Leu Val Glu Glu Phe Met Leu Leu Ala Asn Met Ala Val gcc cac aag atc cac cgc gcc ttc ccc gag cag gcc ctg ctg cgc cgg 623 Ala His Lys Ile His Arg Ala Phe Pro Glu Gln Ala Leu Leu Arg Arg 200 cac ccc ccg ccc caa aca agg atg ctc agt gac ctg gtg gaa ttc tgc 671 His Pro Pro Pro Gln Thr Arg Met Leu Ser Asp Leu Val Glu Phe Cys 215 719 gac cag atg ggg ctg ccc gtg gac ttc agc tcc gca gga gcc ctc aat Asp Gln Met Gly Leu Pro Val Asp Phe Ser Ser Ala Gly Ala Leu Asn 230 aaa agc ctg acc caa aca ttt gga gat gac aag tac tca ctg gcc cgc 767 Lys Ser Leu Thr Gln Thr Phe Gly Asp Asp Lys Tyr Ser Leu Ala Arg 240 aag gag gtg ctc acc aac atg tgc tcc cgg ccc atg cag atg gca ctg 815 Lys Glu Val Leu Thr Asn Met Cys Ser Arg Pro Met Gln Met Ala Leu tac ttc tgc tcg ggg ctg ctg cag gac cca gcg cag ttc cgg cac tac 863 Tyr Phe Cys Ser Gly Leu Leu Gln Asp Pro Ala Gln Phe Arg His Tyr 280 gcg ctc aat gtg ccc ctg tac aca cac ttc acc tcg ccc atc cgc cgc 911



<211> 483 <212> PRT

<213> Homo sapiens

<400> 14

Asn Phe Lys Val Gly Val His Ile Ala Asp Val Ser Tyr Phe Val Pro 1 5 . 10 15

Glu Gly Ser Asp Leu Asp Lys Val Ala Ala Glu Arg Ala Thr Ser Val 20 25 30

Tyr Leu Val Gln Lys Val Val Pro Met Leu Pro Arg Leu Leu Cys Glu 35 40 45

Glu Leu Cys Ser Leu Asn Pro Met Ser Asp Lys Leu Thr Phe Ser Val 50 55 60

Ile Trp Thr Leu Thr Pro Glu Gly Lys Ile Leu Asp Glu Trp Phe Gly 65 70 75 80

Arg Thr Ile Ile Arg Ser Cys Thr Lys Leu Ser Tyr Glu His Ala Gln 85 90 95

Ser Met Ile Glu Ser Pro Thr Glu Lys Ile Pro Ala Lys Glu Leu Pro 100 105 110

Pro Ile Ser Pro Glu His Ser Ser Glu Glu Val His Gln Ala Val Leu 115 120 125

Asn Leu His Gly Ile Ala Lys Gln Leu Arg Gln Gln Arg Phe Val Asp 130 135 140

Gly Ala Leu Arg Leu Asp Gln Leu Lys Leu Ala Phe Thr Leu Asp His 145 150 155 160

Glu Thr Gly Leu Pro Gln Gly Cys His Ile Tyr Glu Tyr Arg Glu Ser 165 170 175

Asn Lys Leu Val Glu Glu Phe Met Leu Leu Ala Asn Met Ala Val Ala 180 185 190

His Lys Ile His Arg Ala Phe Pro Glu Gln Ala Leu Leu Arg Arg His 195 200 205

Pro Pro Pro Gln Thr Arg Met Leu Ser Asp Leu Val Glu Phe Cys Asp 210 215 220

Gln Met Gly Leu Pro Val Asp Phe Ser Ser Ala Gly Ala Leu Asn Lys 225 230 230 235

Ser Leu Thr Gln Thr Phe Gly Asp Asp Lys Tyr Ser Leu Ala Arg Lys 245 250 255

Glu Val Leu Thr Asn Met Cys Ser Arg Pro Met Gln Met Ala Leu Tyr 260 265 270

Phe Cys Ser Gly Leu Leu Gln Asp Pro Ala Gln Phe Arg His Tyr Ala 275 280 285

Leu Asn Val Pro Leu Tyr Thr His Phe Thr Ser Pro Ile Arg Arg Phe 290 295 300

Ala Asp Val Leu Val His Arg Leu Leu Ala Ala Leu Gly Tyr Arg

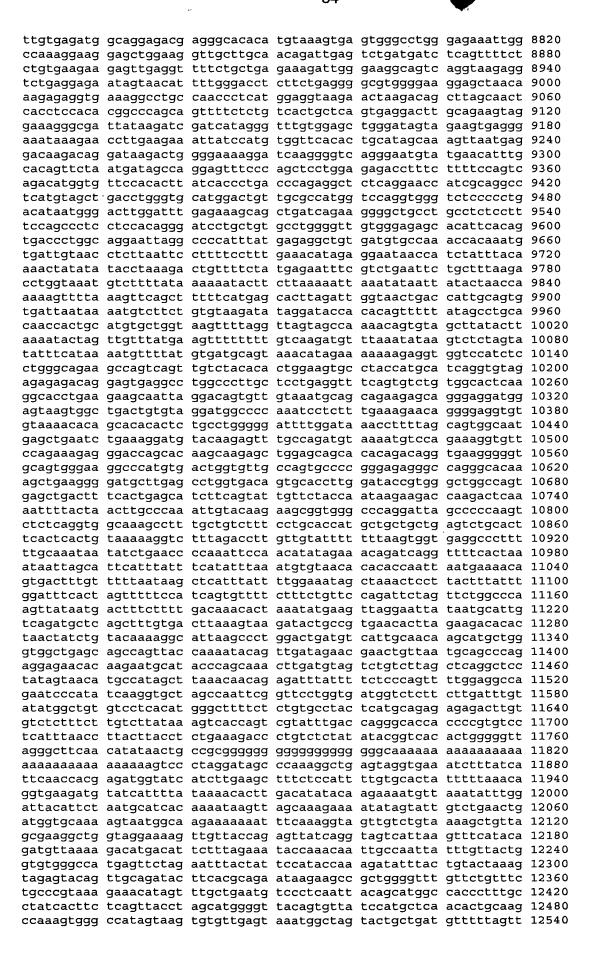
305 310 315 320 Glu Arg Leu Asp Met Ala Pro Asp Thr Leu Gln Lys Gln Ala Asp His 325 Cys Asn Asp Arg Met Ala Ser Lys Arg Val Gln Glu Leu Ser Thr 345 Ser Leu Phe Phe Ala Val Leu Val Lys Glu Ser Gly Pro Leu Glu Ser Glu Ala Met Val Met Gly Ile Leu Lys Gln Ala Phe Asp Val Leu Val 375 Leu Arg Tyr Gly Val Gln Lys Arg Ile Tyr Cys Asn Ala Leu Ala Leu 395 Arg Ser His His Phe Gln Lys Val Gly Lys Lys Pro Glu Leu Thr Leu 410 Val Trp Glu Pro Glu Asp Met Glu Gln Glu Pro Ala Gln Gln Val Ile 425 Thr Ile Phe Ser Leu Val Glu Val Leu Gln Ala Glu Ser Thr Ala 440 Leu Lys Tyr Ser Ala Ile Leu Lys Arg Pro Gly Thr Gln Gly His Leu Gly Pro Glu Lys Glu Glu Glu Ser Asp Gly Glu Pro Glu Asp Ser 470 475 Ser Thr Ser

```
<210> 15
<211> 49999
<212> DNA
<213> Homo sapiens
```

<400> 15

```
gaattcacat aaagttcagt tcctcgatcg cagggcaggt ttcactgctc ccagtgaccc 60
agegacacag etgegtgeet gteagaatga ggeagetaag ettggagtea tgetggttee 120
tctcagcttt ccagacagcc ctctcctctg tgggaaacag atctgttatg ttaccccata 180
gcagccagga tctcttaagt ggacttaagt attcctttat gtattacagc tacaggattg 240
gqcqqaaaaa cctgaaqaat gccctgtagg aaggtggtct ctgagtgtca caccagatga 300
agaataggga atcttaaatt cttttccttg cctgaacccc ttttttcaag catcccacgt 360
ttaagcattt ttccatttta aaaactgagg gaagaattat cccccagtga aggagtagga 420
ggataataag tagctacaca gtttgcagat aaaatgtgtg ataccttagg actgatcatt 480
caggttacca aaagagcaga tggtactgtg ttaataagtt cttctaagcc aacttgggta 540
tgagtcaaga ctctgtcagt gagtcataat ggaaagggaa ttgatccact cattaactgc 600
caagtccaca ggtagactag tttcaggctc agctggatcc tgaagttcaa atgaggtcat 660
aattettett ttettetta gaetattatt ttetgtattg geatgattat gtageataga 720
tgtttcctgg cagctccagg tttatgtggt ccttagtgcc taggatccca ggagagagac 780
cctctttcct qaagttcata tcatttatca atacaacaaq ttgtattgtt caactgaagc 840
aaattcagca ctatgcttqt atcttccatg tgcttctctc tgcccattgt atatctttaa 900
actgtatact tattttattt tattatttta ttttttcgag acaaagcctt gctctgttgc 960
ccaqqctqaa qtqcaqtqqc acaatctcaq ctcactacaa cctctqcctc caaqqttcaa 1020
gcagttetee tgeeteagee ceetgagtag etgggaetae aggtgtgtge caccacact 1080
ggctaatttt tatttttagt agagatgggg ttttgccatg ttggccaggc tggtctcaaa 1140
ctcctggcct caagtgatcc gccagccttg acctcccaaa gtgctgggat tacaggcatg 1200
```

agccaccqtq cccaqcctat atacttattt tacatgtata ctcttttttt gtaattggtt 1260 cattttctgt attttcatac acacatacat gtatatgtat gtacgtatgt atatactctt 1320 gtatgtatgt gtatattttt attttcacat acactatatt tgataggtga tttacagtat 1380 gttcaagaat aaatcttaag tttataacct aactaccctc cctcatttaa ggtacagttc 1440 taacagcctt ggtcacctga ccaactctct ggtaaacctg gtagggaggg cagggcctat 1500 taaaagacag ctccaccagg aagggaagga gcagttctaa aaggaaaaag aaagtgggtc 1560 ctttaccaga gggaaaagac agaccgactg ttgattcatt cattcaacaa gtacttcttg 1620 aggacctatt atgtgccagg tactcttcca ggccttgggt aacagtgaac attacacaaa 1680 aggccttatt tgctggagct tacatggtag ggagagagac agataacaaa cacacaagcc 1740 gatagagata tgccgtgata tctggtagtg atgagagctc tgaagaaaga ccacggtaag 1800 cctcaacagg tgtggagtac gtgctttaca gtgcagatgg aggaaatggt tgggggcggg 1860 gtggtgggga gttggaggag acagacaggt ggaggaaatg gtgggagggg ggtagaggaa 1920 cctcttcttg tttggggatt ctctttcagt tgacccaaat aaagtaagga agattttgat 1980 aggcagatcc tgttaagact atcccaagca taggaaaaag tatgagccaa gccaacatct 2040 aaatggcttg agggaagatc tgttcaggaa atggaaagag gtttcccatg acagctacat 2100 acagagcatg tgaaggatgg ggctgaggtt gcttggggtg tgaccctgta aggacatgaa 2160 taacaggcta agagtacctt tcccagaccc acatttagaa agatcacagc aaagtgtgga 2220 gggccaggtg aggggggcac agaggcgagg tagggcagcc aggtgtgggc tgaatagggc 2280 aatggccaga gggaatggga aggaagggca gagctttcag aggcttcatc tgtaggattt 2340 ggggattaat tcacttctag tgacctaaaa ggatttgttc atcacccaga atgagccata 2400 tcttcttatg tttactcaaa gataagaagc ctttagaaat gggaaacatc ttgggaaagt 2460 ggttaatctt gtttattcac aagaacaatt tcatcatctt ttgctataca atgaggaaag 2520 tgacagtagt gcgggtcaca gagggaggtg gccaaggaag gaagcaagca agactagatg 2580 tgtcacctaa ctgcaggtcc tgtggcctct gggagtgaca tacattctag gaaaggactc 2640 ctgggagaga atgctgtggc cttccacgcc agcctgatag teettetegt gcatttacag 2700 gcaacttcaa agtgggagtt cacattgctg acgtgagtta ctttgttccg gagggatctg 2760 atctggataa agtggctgcc gagagggcta caagcgtcta cttggttcaa aaggtaaaaa 2820 tccatctcta gtttcttttt tcttgctttg tttatttgtt tgtttccctg gaagagtgtg 2880 tgctctctgt tattacatgt tctccggaaa gagaagccaa aggaagacac aggtgttcat 2940 ctgaggcctc atcccagagt ggccctgcta tataagtaac tgacagatac tcagcttcag 3000 aaaqaaaqqa qqcaaaatac ctgctttcaa acgattgttc taaagcaggg ctcggcaaac 3060 tcaqcccaca ctaqcqacta gtttttqtaa gqttttattg gaactcaggc acatgcattt 3120 qttcatqtat tqtqqctqct ttcacactac ttcaqcaqaq tggcatgacg atttcctatt 3180 actgtaagcc ctttaaggaa atgttttcaa cccctgttct aaaaggtggg agccaatctg 3240 gtcctgacct gcccattaca agatagctat gggagtctcc gagatggaaa agcgaaggga 3300 gataaggagg agcctgagct tttccctctc atcctgactg caccactctt ggttagttac 3360 taagtgtcta cagacctccc tagactcatc tgtgaaatga agggactgga cagattcatc 3420 tcaaaacatc ccttccattc tgtgtacttg gacctggcac attcaatagg taaccatgag 3480 aatccattcc tttaacacat atatattgag caccaattat ctgatggtca ctgcagtagg 3540 cctcagagaa aggggttaat aagagaccaa gcatgagtaa gttctgccct ccacactgtg 3600 gttcatgaat tctgccaggt ttctttctct tctttccctt ctctgatcct ctgctcattt 3660 gctcatcttc cttcttcggc catatctgga cttccacttc ctttctagct ttttaaaatt 3720 tggcagtcca gtttgggatt ctgcctatac tagcttgagc cttcctgcct cccaagccca 3780 tgccctagga catgattctg gtatttgctc attgactgcc ctaaggtcag aggaatatcc 3840 ccaccatcca ccctagaatg cagcaccaca ggtgcattct agaatttctg ggctccactt 3900 ctagcaaagt gcctacttga tgttcacaaa ggtattggca cttctggagc aaaagctatc 3960 caggaaagcc caaaagtttc taggatttct ggtatttacc aagtgttact gagagttcct 4020 ctcatqtttt caacttqtcc accctgaaaa ctaacctctc aaaagggaag agaccagtct 4080 aggetttgag tgeagecata teetetaggg getgaagate etgttgeetg tggeecaagt 4140 ttagttcccc cagtgtagct gagcttatca gttgacagtg atgtcttcca ccccatggtg 4200 gaaatcacct tgtctgagac cctttgctcc tgctacaaag ggagctagcc tagatgggct 4260 ctcttgtccc aaaggaaagc cagagctgtt atctgccata gccgccttca atatgtggag 4320 gccctaccta ggaagacctg gcacctcctc tcccctgccc caggacagta ctctctggat 4380 cactgaaacc tagaatattt gagcaaaacc ctagctccac ctgctccagg agacttgtac 4440 agccgatttc ttcagaagta cagctttgcc taccattcac attaggtgat cagaaccacc 4500 atgtacgtgt tttctgccat cccagaagtg agaatagtga atagagagga agacagagtt 4560 gatcagagcc aggaaattct gagtcagaag ctgtgtgatc atcaaaaccc cattccaggt 4620 aactgtgtca tgggcaatag gtaatctcaa tgcacagtga tgcctgaaag acccagcacc 4680 ttcagtgacc aattagtgag aatagttagc tgtgtcctca tctgagcagg gggaattccg 4740 taccagactt tgcttgtgtc aaacgtactg tgtccctccc tgacctctgt ggctggccta 4800 agcctaaatg caatgtttaa gaacttctct ttgccccccg acccctcaca atgtctatga 4860 cacctgagtc caagctctga gcaggtatag gcagcttaag agaatgcagt gcaaacttct 4920 gacccacaag tatctctctt gagtacatgg ggcttcctcc ctgaccccca tggccatgaa 4980 gccacggcca tgcactagct gctgcgctct ccttttataa ccaggaatta cttttcaaaa 5040 tcagaaaatg aaaaaatcaa attgggttaa gtaattaagc atgtttcctt ttctgtttcc 5100 tttggttttg tgtttgtcac agttctagaa tttctctgtg ggactacaga gttggggctc 5160 tgctgctgag ttgtgaaagt ggggagctgg gtggaggaag ggcccgcacg cctctgctgc 5220 ccggcactgc ctccagcttg gcaggcacaa gtggcgccgg cccgcaacct tggacagcag 5280 cagetgtgeg etetgattee tittgaacege tgetetgace tittetteeta eteggittitg 5340 tttcttaaag gactgtgtcc aggaactttt ctgctgtttt cactttactt tgcctataaa 5400 ggtcttctga aaagctggat gagctgtgtt tccgccctcc atattctctg ctttctcact 5460 tggcacaatc atttctccca gcttcatcac acaggggaag gggggctggg gttccagttc 5520 atttcccatc tatagggaat gtggcactga tttcattcag atctgtaagt gactgatgcc 5580 agaactgcaa tcttagctcc ttatctaaac tctaattggg ggattaaccc atggagtagg 5640 acagtataca gtgtaacagg tcttgggtcc aaataccacc tcactgactt taaatgaaat 5700 tctttttgtt gagattttgc tcacagtaat aagtatttgg ttattcttgt taacaatagg 5760 gtataatcag gtggaaatat aaatttaggt agtgtccatt taaatatcag gaaaaaactt 5820 tttgacaaaa gatgattccg ttagataggg gacacctgcc cacctgaatt ttggtctgtc 5880 tttctcagaa ggacacaaca tttgctcagt taatgcctct caactgtctt ctctgggaga 5940 taaatataat gtaattgcca agtttaaagt aattttagaa aataagccaa ttaagcttta 6000 aaagtaaaag aaaacctaaa cagttgaaac ctaaacctaa attttctgcc tattggccca 6060 agcattcatg ttattttagg tgcgaaacag ctcaagtgaa agttcgccca taaatctcta 6120 cgatatttta ttggtactgc tttataatag agatcaaaga ttgggattgg aagcctgtct 6180 taatgtagag tccaaagagt tttaagatgt ttctttctga caccagcagg ttgtcagagt 6240 gttgatgttt tgttaacgtc aaactgtgta gcaaagagtt gatcaaattc tgaattcatg 6300 gaagtgttga tatggaaaag aaaactcttt aaacagagat gttggctggc aagtgaatta 6360 atctatttcc tttaagttat ttcagtgtgt aagtagggag ctagctgagt gtaccttgtt 6420 gttaaaacct cgaagtcctc ggagaaaagg gggaaaagtc accaattctc agactgcaga 6480 tatgggctgc gatggccaat gggttatcgc actgaaggcc tgagggagtg tgggtgggga 6540 gccagcaaag gcctgggctg aaaggggcag aagaggccct gcaacctctc caggtagtgg 6600 agaagcccct atgacttggc ttgtgggcat ctggctccca catcactgct agtccttcct 6660 gctcctcctt gcctgaatga ttgattcttc ccttctgtgg ccctttgtgt tggtcacagg 6720 gctgtcctgg ctaacctgct gctgaacttg gccagcctgc ccactgtggc tttagcagat 6780 gtttctgctc tctgaggcta atataaggtt ttatagtctt gttggtaccc ccacccagct 6840 gccttgggca gtggtgtatt tacccaaatg ataaatttct ctctactctc tcaagacctg 6900 gtccagaatg cttagaaagt cagtgtccta tcatcactat cccttttctc cacggccagc 6960 tettaagete tgeeetgaet eaactttggt eetggeeeca aageatgett aagaggaett 7020 agcatcette aagcceegtt teettttetg etgeetgaag tgettateag tetteeteea 7080 cttggtattt attgagtacc agctgtgtgt catgttcgag ggatgtaaag atgagacaga 7140 ttctggtctt gccctgggga agcagaggag gtggacaggt agcaaacact tgcaatgcat 7200 caggctacct tcaggtacag aagtgcccca aaggtgagga ggtgttagag aagagagag 7260 ggttgtatct gcctgggctg gtggtgggag aggagcttct gcaaggtcca agaaggcttc 7320 acaaagcaat cgtgttttga acagtgtttc acattttgag tagaaaattt ctagatagac 7380 aaaaatgggc agagaggca ttccaggcag aggctagaaa aagcagagaa cattcaagga 7440 gcagtatgca gtttggaatt cttggggtgt gagttgtaga gagagccacg gatgaggtta 7500 caaagagaag cctggagtgg taggcgaagg agctcagatt ttgagggcaa gtagggaagt 7560 gatacggtct ccttccacca agatagaaaa tcaccttagc aactgtgtgg ttgaaggata 7620 gtgaggccag aggcaggaaa attgtcatca gtacctgggc cctttccccc agtcatatcc 7680 tettgagget etgaataaet acceeaaeae agagatettt geteaeaaaa tettatgaga 7740 gtttaccaat gtggtaatgt ctaactggac cccaggagaa ctaggacaat agatgtcttc 7800 agcctagtgc caaatggaca ttctgaacaa gcagcatttc agttacttca aattgtagtt 7860 tetteceaat tetggeaatg catateacae aagaagaagt agggagaage aaagggeagg 7920 gaaaatggag aagttagett eccaetgtta tetttgetgt ecceteggag atagggteet 7980 tetecegett eeetgtgggg aactettgge eacetgtgae ettageeact gaacattgag 8040 ggtgcaggct tttccaaaaa ccttttggcc ccatggaacc ctctaggccc tccttcatcc 8100 acaggacatg caaaagtcca tttactaaat tcagctcctt agctattggg aaggtaaagc 8160 cagtgtgtcc taacataaat ggaattgcag attatcattg agtggagatt agtaagaaga 8220 tgcagaagtc tggagaataa acaagtctta tctagaataa tttctacttc agaattgtca 8280 ctgqttttta tctgagagag gaagagagac atatccacac ttgaatagtg gaaggaggag 8340 aqqaaaaqac tcatttgaqa qcgttagaat gtcagatcta ggcttgggaa gtgattggat 8400 qtaqaaqqqa qaqaqagqaq aqtqaaqaat cacaggcaaa tccccagctg tgttctgggg 8460 acaggggtga ggagtgtggg gagacatggg tgtggtgttt tgatttttgg tggttttgag 8520 ggaggggtgg tcgtttgctt ccttgcttat ttaacttggg acagagcgct gctcttaaca 8580 gaggtaggaa atgtagtcag tggaacaggt aaagaaggga ggaaaatgct gaactttgtc 8640 ttctccatgt ggagtttgaa acattcatgg gacatccagt tcatggtatc cagagggcat 8700 tgtagacgta tgtggagtca caaggccaga tggccagacc ttggacaggg aagacactcg 8760



agagaggtgg ggtggatggt cctgccatta atcaagaaaa atatgggaaa aggaacagat 12600 agtggtagat gggagagagt ttttgaagta atttcaggag atacagatag agatattcat 12660 ttcatctttg gaatagtagg aaaaaaaaca agtaatattt tgggacaact gcaagtcatc 12720 atttgaaagt aagctgaaaa acagttttta attaaagagt atataccgtt gactcagttt 12780 attatggaac agaaagatca ataaggagaa gaaataattt aggcttaaaa aatgggaaaa 12840 tggataacta gttgatcaca atgtttatct aggaaacctg gatgtatgat cctttctgtt 12900 ttatcactct agtgatattt tattgaagta gtctcttaat gttccaacat gtaatttggt 12960 aaattacggt atattcagtt actaaaacat tgattcaaca ataacaatag cttattttac 13020 tttaacaaaa ccctgtccag agtttacact caacccttgg gctcttaagt atatgtataa 13080 ttcaactgga gtgcttatat ccaaaagcac aagtacttct tgagtctgga gcttcaggtt 13140 tagtagataa tacaatgtag ctattttaca ttgcttgcat tgtacttttg tcttccctta 13200 ccagttctcc tcactttccc agctcatatt cctatttgac tctagaggcg catggaaaag 13260 tatacaacag tgtggtcttt ctgcagagtc tttgggaaca gagccacctc catcttcagc 13320 ttgctctgga aaagctgaag ctgttcacca aaactctgcc cactgggctt ctcctaagcg 13380 ggttggagaa aggtgctcat gggcctgtgc tctatttaca ggtggtcccc atgcttccca 13440 ggctgctgtg tgaggagctg tgcagcctca accccatgtc cgacaagctg accttctctg 13500 tgatctggac actgactcca gagggcaagg taacaactta cacgttttct ttctccactt 13560 acctetttte tgttecatga gteatgaage acteaceatg tgcetggeae tggettgggt 13620 gccatggtgg taagacaagg gaggtatgga gtagccatca tagagaaatg tcagagtccc 13680 tgcctcggaa gagccgttgg ccccacttag aagccaagac tgaccttaag cacttagaac 13740 aggettettg tetgttatea ggtgaaggaa gaaattgagt aageagagtg atgeegggga 13800 ggcttatgca ggagacaggg tgtaagtggg attgaatgag gattggcaaa ggcaggaggg 13860 gcagcccagc ctgcagttag gagagcagag cctgtttaga ggaggacatt aggtaaagtg 13920 ggaagtttac ataggtgggg tgaaatcaaa ctggagaatc acaaatgaat tgtaggtgtt 13980 agggttcctc tgaagtgtca tgagaaagct gattgtagaa aggtcagtgg tgcatcgtca 14040 tgctggatga ttggagcggt gaagatgaat tagcaaggta gtgctataat caaggcacaa 14100 ggtggtgaaa ccacagacca agaacagagg agagaaggat gtcagcaggg gtttctgggc 14160 ataaggaaaa agatgtctgt gcctgtcgtc gggatgtgcc tatgcgtatc atagggaacg 14220, gcaggagaga gatacatgaa agagaaacta gtcccctccc tgcaaatgta acaactccaa 14280 acattcagaa gtagggtcgt gattaagtaa gccctggtgc cttctcagtg gaatatatgc 14340 agttattaaa gttgttgaca gagaccatgg aagaacatgg gaagtgttta tactgtaata 14400 ttaaatggaa gtaaaaaaag atatttaatt ataaagaggt tccaaataaa gatagaggat 14460 caaataccca catttacttt cattccctcc caaaacctca ctaaaacaac agtaaaagga 14520 ttttttttt taaagacata aacccacaag gacaaagaga gtgggagagg agacaacagc 14580 aacaaaattt tggaatctgg gtagcagatg gatgagtgta actgacttag cagtcctgag 14640 aaagctgaat cctgagccag caatagagaa agccaagaaa caacccagtt tatgcagcag 14700 aaccctaaac aattcagaaa ttgacagtac cagataattc tagaaagtgg gggaggggtg 14760 ggggagagtg aggctaacaa cagtattgaa agtttatttt taaaaattgc ccctcctata 14820 acttagtgga agatcagaaa tgtgttctct agacagggta aagtaagagg tgtctgaact 14880 agaggacatc aaacatgctt gatggcagtg acaccttggg ggagattgag tgaatgttgg 14940 catactgaac gttaagagtg tcagctttct ttttgctgcc agccccagaa ttctggtcgc 15000 caggcctata tccatgagtc gggacatggg aaaatctctg aggactctga atagtgagga 15060 ataaaaacat aaagatacta accttaagag tttcccaatc agcagcccag ctgtctttcc 15120 ctacagtaaa gcttacagac aataagcttc acccgcacaa tcagagcttt ttaggatttc 15180 atttccatat atgaagagac aacccgaggg aagcttctaa tgtgaaatag ggaggctatt 15240 actaatgcat tgattcaaca atagctttat tttactttga tgaaaccctg tccagagttt 15300 acacttagcc ctagggctct taagtatatg tgtaattcaa ctggagtaca aacaaaacag 15360 gaaagaagta aacaaacaga aaatgaagta aacaggaaaa agtaactaga acaaaacaca 15420 ctagcaggga aaagaaatta tcacttatat ctttagggaa tttttttaaa aaagaaggta 15480 gctgtatcac aaaatcttga tactttaaaa aggaaacatt tggagggaaa aaaagagctc 15540 ttgggaatta aacacaggtt agaagaatta aagattcaag attcctactg aaaggtaaag 15600 ttgaggagct gtcccaagaa gagacagaaa agacaaaaaa ttagaagact agtccaagat 15660 atacaatatc tgttcaatga ccgttccaga aatagagaac aaagtaaaca gaggaaaaga 15720 aatgatcaac aaaataattt taggaaatgc cccattcctg gaagatgtga ttttccatat 15780 tgaaagggca cactgcctag cacaggggtg gaggcacatc atcaagacac atcattataa 15840 aatttcagaa cactgtggac aaagaaaaaa agacatacga taaaatcgga aatcagaata 15900 acttcagact tttctaccac aaccctagaa attagatgac agtgaagcaa agctttctaa 15960 tttctgaaga actgtgatct ccatgccaaa attctgtacc caacgaagct atcaataaaa 16020 agggtaggaa aggacatttt cagacataca aggcttcaac aaaaatgtcc atctcataca 16080 ccctttctca gaaagccacc agaagatgtg cttcaccaaa atgaaggagg agtaaatgaa 16140 gaaagaggaa gacatgggac gcaggaagca gataatccaa tacaggaaag aagtgaagga 16200 atcacttaga tcagggctgg cagacttttc ctgtaaaggg ccagatagtc agtatccctg 16260 tcacagctac tacactgtcc ttcaggtctg tcttaaagaa gatgctaagt gccaggtgtg 16320

gtggctcatg cctgttatcc tagcactttg gcaggccgag gcaggtagat cgcttgaggt 16380 caggagttca agaccagcct ggccaacatg gtgaaacccc atctctacta aaagtacaaa 16440 aaattagctg ggcctggtgg cgggcaccta taatctcagc cacttgggag gctgaggcag 16500 gagaatcact tgaacccggg aggtggaggt tgcggtgagc tgagatcgtg ccattgcact 16560 ccagcttggg cagtaagagt gaaactccgt ctgaaaaaaa taaaagaaaa agaaaaagaa 16620 gaggacgcta agetggatee tetegtggge ttetacatte tgtetgttag aateagttgt 16680 tttggttgat gtgtagatat gtagctggaa aagaaaggag cattttaata actttttcag 16740 ataattgtgg ctattcattt ttgtactaca ccaaacttta atagtttctc aaaagttggt 16800 tgggccaggc acagtggctc acgcctgtag tcccaacact ttgggaggcc gaagcgggca 16860 gattgcttga ccccaggagt tcgagatcag cttgggcaac atattgaaac cctgtctcta 16920 ctaaaaacac aaaaattagc cagatgtggt ggcatgcgcc tgtagtccca gctactcagg 16980 aggttcaggt gggaggatca cctaagcctg ggaagtcaag gctgcagtga gccatgatca 17040 cgccacgcaa tcccagcact ttgggaggct gaggcaagag gattgcacag cctgggcaac 17100 ataatgagac cttgtgtgga tgaaaaaaaa taaaaaacag acaccagaga gtgagctctc 17160 tcatctcccc aaaataccca agtctaaact atagtttgtg tgtcagttgt tccttcaagt 17220 aaaaatggtg ttccataaaa tgagcaatca gttcacttca caactcagtt atgtaattgc 17280 ttttcctcaa gaccaccagc gtacctctac atgcagcaaa agtgaaaaag acaagcaatc 17340 aagggttgag acatcataaa attaataatt tttactcctc tgtccagagc attcggttgt 17400 tcgatacgag tatgaggtat tggagtgcaa tagccacagg tgtgcttgtc ggatttgcac 17460 caaggcagcc actttaccca cgagggcttt tgtgccacca gtgtaaatgt cagcacgtgg 17520 aaaggacaaa cactgcctta gtatttttat gaaaatagtt ttaacctcct ggattcctgg 17580 aagggtetea gggateeeta ggggtacatg gaccatacet tgagaaceaa atggacagtt 17640 ggtggaaagt ttggggtaga ttaatataca tagcacacag aaaaaccaag caaataaaaa 17700 gacagttatt aattccagtg agaataaaaa gttgtataga aaagaaaagt aacacttagt 17760 atttatgtaa tcataatagt agattgataa aatgaattct gatcattgtc atgtattagg 17820 aggattaagg actagaatag ttacgtgggc atggtgggg agggagtgtg tatggaagaa 17880 aaaataaatt atcttctgta gtgaaaagtt tgcaaataat gcctaaaaaa aatcaggaag 17940 tagcagacag gttatataga aagttaatat ccaaatactc ttttaaaaga ggtaaaagta 18000 gttactcttg ggaagtaaca gagagggatg ggggctgctg tttttcataa caatacttta 18060 aaactatttg aactatgtat actttaatat ttttattgtg aaaaatttca aacatacatg 18120 aaagtaaagg gcacaataaa cccatcctcc ccacttccca gattcaacta tcaagacaga 18180 gtgttttaaa acaaaccaca gacatgtcat ttcgctcata catattttag tatgaagctg 18240 aaaaaatttt ggacattttc ttatatacca cagtgccatt agcacaccta acagtgacta 18300 ctaatgcctt ggtgtcattc tgaacccagt ccgtaataga tttccttcct ttctcccata 18360 gattttcctg aattgggatc aaaacaagtt atacacatta tatttggttt ttatggctct 18420 taaatatcgg gttaataaaa aaaaagcacc cttttaaaga tttttttaag agttaagagg 18480 caaacgctat ctgaaaacag aaggaattat gaggacagta tgccagcaat catattttgg 18540 tqqqqqtqqq aqcatqcata qgggaaaaaa tgaatggaaa aagaccagta ggaaataaaa 18600 tcgaatgcca atagcggtta tgtttgggta gtaaaactat gagtaatttt ttctactttt 18660 ttgtattttc taatgttttt tgaaaacgtg tagcttttat gtttttataa atgcttattt 18720 tcgtgaaagt ttaactaaac agaaaataaa agcccataga agaaagctaa cttgagtcaa 18780 cagaaaagaa ctttgagtct gaattttgcc tgccaaagtc agacccaaga aataaaaagc 18840 tgcccaatct aatgagette taaaatatga gggtcataaa agaageacta gaaagtggca 18900 aactctgtaa ctcagttggc ctctggggtt tctgttggag gtagtgtctg gtgcccaggc 18960 cactggcatt agggactaga gagcaggtgt gaagtaggca caggatccag gaggggctgt 19020 gggcctcagt gcaaaccaag ccagatcgga agtaatgaga gtttggacta gagacagagt 19080 tgtagggcaa agcccactaa ccacactcct tgtactgttg gttatccaaa caccctgccc 19140 agaccaagcg accacatgag aggtagacct ggttggttag tcctgggatg agtatctctt 19200 acccacaatc aagatgcatg aaatgagagg tcagattcca gactcacatc caagggatgg 19260 tccttcctca agacactggc aaggaaagct tgagtttagc aagggctggg ggaacaaagt 19320 tcggaaccag atgggagggt tagggagcca gagaaggcca acgggcaagg ggtagccctg 19380 catcaagaac ccagtgatga agaggaggat ctccgaagcc tgtgtggcca aagtctgagg 19440 ctggttttgc atgcagtggt gacttctctt ggcgtaaagg tttggactta gaaggagtca 19500 gagcagggcc aacagcatca tgccacagct gctgcgtagc caccagtctc acctggagtt 19560 gaagtggaga aagctctgta tttttcctta gtctattgga atggcttact ttctggagca 19620 ggcatggtca gctatagaaa gattgttcca acgttttctt aacgcctact aaattttttt 19680 ttaaacactc acaagaaaat cttggacatg tatgcattca ttaagctagt gctcaggctt 19740 ttaggtcaat aaacgctgaa taatttattt ttagcatatt tctcacatgt tggttgtgag 19800 agtottatto totgacttag taactaagto ottagacott agaacottag aatottaggg 19860 ccaaagatca gaataataaa agaagggtct cacaattgat tagctatcct cagtttgcgt 19920 ctcctgtgac atccctgctg tgtgctgtac aggattagtc aggacctgga gtgtactatg 19980 gaagtegeet attteageea tttacttagg teaaaaacea eggggteatt ettgaetttg 20040

ctgaatgcct ccagaatcag cccccttcct taactaccgg cactaatacc tgcgtccaag 20160 ctattctctc tcaccttgac agatacagtg gcctcctgac tgtccttgca gcctctgctc 20220 ttgccccacg tcatctcctc tgcatacagc tgtcagagtg atccttctga atcttaagcc 20280 ttgtctctcc attaaaactt tccaatctct cattcacaat aaaagataaa acgcccctt 20340 acaatggtaa ettttteett gttettttet geetgtette tgtgetggaa atgeatagae 20400 tccagagtct tcctgcaacc agcatctcct ctcatgtcct ggagcattgc tgctcacagg 20460 agagaagctg ccttttatgt gtaactgagc tctctgctgt gctgcaggcc ccctccccag 20520 ctccaqqqac ctgacatcag tcaaggttga gtttccccac ctgccatctt ctcatatcct 20580 tcaagcctct gccccttcct tgtagctgag cagatctttt cctccctgct taactcattc 20640 cattctgaga attggacatt gtagaactat gttgtgtacc agttggggct ttctcagctg 20700 aaccttcagt gctacttggg aatcctttta ttcgtcacta ggttccaagc cttttttctt 20760 eggttecaac etcaacettg etttecacte etettteett taagaceeat catteteeca 20820 agtacctttc attcctcctt cttggaaacg agagaggcta gccaacttca actgctgagg 20880 tccccctttc cacatcaaaa tttctctctg ccttgccgct acttaggagg ctgaggcagg 20940 aggatcactt gatcagattg agaacagatc gagaccctgt ttctaaaata taaatgaatg 21000 aataaataaa taaatatttg gctgggcatg gtggctcata cctttaatct cagcactttg 21060 ggaggctgag gtgggcagat cacctgaggt caggagttca agaccagctt ggccaacatg 21120 gtgaaaccct gtctctacta aaaatacaaa aattagccag gcatggtggt gggcacctgt 21180 agtcccagct acttgggagg ctgaggcagg agaattgctt gaacccagga ggcagaagtt 21240 gcagtgagcc acctgtgaag agaaagcgag cattctgctg ggtgtataag tggattgtgt 21300 gcaatggtgc ttcagtctag atattcatgc cttaatctta ctgtgttcgt ctctcccttt 21360 ttcaggggaa gcctgagctt tgcttagtga tgatggccct agtgtgagga ctggggcttg 21420 tggagtagec tettgtttgc tetagecacc ceaetgcetc tgtcetetgc agttactagg 21480 accttcccta gcaagtttgc gtcctttcca ccacaggcat gacctgcctc tctctgctct 21540 cttccagccc gtcctctctc tgcctagtcc ttttcagaca cttgcttctt ggcacctttg 21600 acttttctca ctgccgggct gcccctacta aggatgattg ccctgttttc gtagctctaa 21660 gaagcagcca aaatccactc cacctccctc ccaccctccg tcactccaaa cagcctggtt 21720 ttgttccagt caggaaaagg tttctttctt cctcatattt ttttgaacaa aatattttgc 21780 atacggaagc ccggagctcc tgcaaaagtg attttgtacc taattattta agattataag 21840 ttaaccccac ttgcagtttt ttcagccaga gatacatctt aatgaagtgc tgacattttt 21900 cagaggataa atttaaagat acatttgaat ggaactgaat aattttcaaa ggaagtggtc 21960 atacttctgt atcaatatag aaagttgatg tgtgtttgag acatacttgg tttattttac 22020 ttcatcatct gcctctgtct aatttatgac cttcacctga aatggaataa aagtaacact 22080 agattttggg tctgtcttta actggatctg gtcttggccg ccacttagga gtttgtatga 22140 cttttgacaa gttcctggcc tgttttctca actgtaaaat gggctgaaca atgcactcct 22200 cccagatgtg ttaaggagat tttagaagta gtaggtttaa gaatactccg agtgttagac 22260 tacttccqqt cttacttagt acagtaggta ggccttgaat tacagtgctg tagtacataa 22320 ttatqtactc ctttttcagt aqttttttcc cagtaatacg ccttcagtca gtgttggcac 22380 tgtatttaat ttgacattct gaacagtggt attccagagt atgtgcagta aactcacctg 22440 cctacaqaaq aqtqacccaa atcctqtqat taagaaagaa aagaggggcc aggtgtggtg 22500 gctcatgcct gtaatcccag cactttggga ggccaaagcg ggcggatcac gaggtctgga 22560 gttagagacc atcctggcca acatggtgaa accccgtctc tactaaaaat acagaaaatg 22620 agccgggcat ggtggcatgt gcctgtagtc ccagctactc aggaggctaa ggcaggagaa 22680 tcacttggac ccgggaggcg gaggttgcag tgagcccaga tcgtgccact gcactccaac 22740 ctggtgacag agtgacagag tgacagagcg agactctgtc tcaaaaaaaaa aaaaaaaaa 22800 aaaaggaaag aggaaagaca tgatcttctt tatgaagtgt tttgtttctg aagctctccc 22860 tgctgtttct actttttccg tgaaaaactc tgtccttttg tcttctgcca ctggctttgg 22920 ttatgcactg ggcattgatg tgaatccagt ttccaaattg gaaagtaatg aggtgttcca 22980 tacagagagg cctgccttac atactgtgag gttggctatt ccgaggaccc cctccatttg 23040 gatetttget ttettgetge etttetetgt gteagaegae aacagaetee tttettttet 23100 gcttggcgtc tgcagaagat ggtttcaggc cttctttccc tggcctagtc attttttagt 23160 acatgtcagg tgtgactccc agaagcactg gactgtgtta aggcatagta gattcggctg 23220 ccagaggtcc ctgtgcctga gcaggaagtt cctgatggct cttcaagctt ctacctcagc 23280 ccttcgtgta tttaaagaga aggttgggat ggattttcag ggttgcaggc gttaaggaag 23340 acgactgaag tgaagcaaaa cagctatggg aaagtgatca tcagcactgc agtctccaat 23400 ttggtggtgt tcctatgtgc tgttaggaag ggacatctta tctatcttga ctgataagga 23460 aacaaagtag aggtgcccat taaggaaaaa aaaaaaggag ctcaaatgaa ctggtagcca 23520 atgccagcat aggcggtgag caggctttgg taaagagtga caagctgctg ctttgggcaa 23580 gtctcaggta atcaatttta ggaatacctt aggattccaa gtggctcctg gtcagggcca 23640 gcaatcagag gggtgagaag gagctacaga gatgtgctta gagccaggag acgtgggcct 23700 gcagggtaca ggggtgtctg ggaacctcgt ggaacttgct gctacgtttt atgcataaat 23760 atttcaggga ggagggcctg gagcattcac taagtttttt tctgtttgtt ttgtttttt 23820 gagacegagt eteaetgtgt egeceaaget ggagtgeagt ggegeaaett eggetegetg 23880 caaccaacac ctcccagact caagcaattc tcatgcctca cctttctgag tagttgggat 23940 tacaggtgcg cactaccatg cccggctaat ttttgttttt gtttttgttt ttttgtggaa 24000 acggggttcc attgtgttgg ccaggccagg atgccaaact cctgacatca agcagtccac 24060 ccgccttgac ttcccaaagt gctgggattg caggcatgag ccaccgtgct tggccaaaat 24120 tcactagatt ttgaaagcag ttcttgaccc atggcttatg tgaaagcaaa tgcccgatca 24180 gggtgcagtg gttgccctgt gctggagcat tcactaggga aaaagaccgc agaccctggg 24240 aggetgeaga ceetgtgace tgaatgetgg atgetggagg gaaceteeag accaettgtg 24300 aaatgtgaaa gagaacagtg gaatagaact gaaactgacg ttccctgagc atgctgaagg 24360 caqactqtac agcccaatgt agacgcacag gaggagtgac tgggtttgga atgaaatgta 24420 gaaaaggaag caagctaaat caccagggga aacccttgag accacaagaa tgaagaggtc 24480 atggccctgt cattccagag gaggctggag cagctcttca ggaaatgtgg atgtgcgaag 24540 aggacaagcc tggctgagcc taaaaggggc tcttcagact cttctggaga cctgcacatg 24600 gcactececa etgggaetgt eaggtggtae etggaattga etetaeagtt gettttgeee 24660 acagcacaca catgcttcct gagagccaaa ttcagacctg cttgccacag tggaagattt 24720 gtgagattat ttgaatccct tatatctttg gatagtggta gttcttggaa taatatggaa 24780 agaatagttt caggattttt ttaaaagaaa agttaaagtc agtgattaca gattcaagat 24840 tettataaga etttgetetg gataaaaatg tgagtagttg ceaceattet ttteetetae 24900 cccatggctg ccatttttca agagtattga ttcttccttt aagggagggt gaaggtacca 24960 aagtggtctc tccagccttt cagggcagaa gctgtattcc ctggaggctt tgtggtgtga 25020 acagcacctg ggctgggctc agtccttccc catggggaat gcctacatac tcttcaactg 25080 gctttttcgg aaagcattgt ctgagagctt gtgaacagaa gggttggctg gtgaagagca 25140 aggcaagggg gatgtctgca agcccaggtt aaaaggtaaa atgttctact cttgactggt 25200 gctccctccc ttttcttgca cagaaaatac acttccacgc atttatccag agcttttcca 25260 ttctcctcag gccctcaaac tccacctagc ctcctttgta ctttgcctca tgctcaacta 25320 catagattgg ggttctgtga tagtcatgct ctcagcttcc ctcttcttcc cttcagggtc 25380 tectgeeett teetteette etteeteece accaggetgg getteetetg tecaggatgg 25440 atggcctcca tttggcccaa gatccctttt gttctcttgt gtcttcagtc ttccttcagt 25500 gctggtttct cttctttacc ctacaactgc cacacagccc tctgttctgc tcattccaaa 25560 gegeteette ceteetgtte tittggaagt ggteateeae aetggttgea tigeeteege 25620 ttccgatgcc cccacctatc cttaacctgg tgcttcccag gttttttcat gtcatgtcac 25680 acacagaaga tgttgctgtt tgagtagcac cggggacgtg tgcatgaggc tgatgggagg 25740 ccgaagetet ggetgeeetg ggagtaagaa gagetagage ceteeteaca gegteteeag 25800 aacccatttg cagtacatgc cttaaacctt tgcagtgtga ctctgcccct gtcctatatt 25860 ttcctaaaat agccttcata aacaccacca gccagcaaat gctcaatgcc aggagcttgt 25920 ctttgttttc tcctccttga catccaagtg gcattggaca tacacttgcg gtttagagag 25980 actictaggge tggactgeet gggtteagtt ceeagetttg ceagteteta geagtgtaac 26040 cttgggcaaa ttccttaatt tctctatgtc ttagtttcct caactgaaga agaggatagc 26100 aaaattccta cctcatagca ttgttatgag aattaaatag ttgccatatg gagagtgtga 26160 acaatgcctg tctcatagca attgctctct gagtgccctg tgttgtcttt gagtcccctt 26220 tottaaagot ottttotoot gottttoota acatoggtoa otootggttt ttgtootgto 26280 teteteaget etettgtttt ttetaetgtt tteatteeet ggettetett eteteettaa 26340 catgaaggag gtgttaggcc aagcagcccc acctccccca accgcccttt cttccataga 26400 cccttccacc tccaaacggc ccaggcccac atccgaatgc ctgccagatc ccctcaccta 26460 catctctccc tgaacctcag acctaggagt ccccaaaatg ttttaatgtc ctttttttgt 26520 tttaaaagta atacatattt attatacaaa atacagaaaa gtgaaaataa taaaatgcac 26580 ctcagtggta atcccaccgc tcggctggca ccaccactaa acttgggtat atctccttca 26640 agcccagtgg ttctcagcct gggccagctt tcccctagaa gacatttggc catgtctgga 26700 gacatttttg attatcaact tggtagggag aggtgctcct gacatccagt ggatagaggc 26760 cagggatact gctgaacatt ttataatata cagttcagcc ccctggccaa caaggaatta 26820 ttcagcccaa cagtgccaag attgagaagc ctgttctaga cttctgtctc tacatatgtg 26880 ccccaaatgg aaaagtcgga atgggtttcc tctttctagc ctcatcttgc ttctccacct 26940 gtgttcactc tttttgtcag tggccccacc tcccccttct ccctcactcc acatccgagc 27000 tgttcccaag cctgcagagt ccctgtctgc cacattgttg gcagctctct cctctactac 27060 tctcagtgtc gacattgatg cccactcacc gaaactaatg aaaaagcctc cagcatgcct 27120 tgcctgtgcc actggtgtgc ttggggaccg tccataggtg tccagtgccc attggattaa 27180 ttccacgcca ggtggagact aagctccctg agggcagcag cttccatctc tgattcatct 27240 gggtgcctag cctgaacctg ccaccattcc gagcacacag tcagtgctca ataaatcttt 27300 gttgaatgtg tatggatgaa tggctgaagg aagaaaaacc tgaaaaacat ttgtcctcac 27360 aattcccttg taatctgtcc atctttgcag atccttgatg aatggtttgg ccggaccatc 27420 atccgctcct gcaccaaact tagctacgag catgcacaga gcatgattga aagcccaact 27480 gagaaaatcc ctgcgaaaga gctgccccc atttccccag agcatagcag cgaggaggta 27540 caccaggccg tettgaatet ecaeggaatt gecaageagt taegecagea gegetttgtg 27600 gacggcgcac ttcgtttgga tcaggtcagt acgtgttttt ttagtgtagc caacagattt 27660 gactcgtgcc tgaacccagc gtggatgagc gcagcttggc aggcttagac tcttccttcc 27720 ttctctttgc tccaqqcacc acactaaaat catgttctct gaggccggca ggaactaact 27780 cccattcact ctccaaatac aggatattat gcaaaatatt ctgtattttg tatgattcca 27840 caggtacacg aggcctaatg acatgagcca aggcaaagag tgggtctgtg tgggtggctc 27900 tgaccaaaac ccccagctgg tcttccctgg taaggctgtg tccagtctgt gatcctcacc 27960 tcaggtctct actcaaacct gttctttaat ggaggcaaga ataggagaca cggaaattta 28020 ggaggcagct gaccagtatc tgatacgaag gcttggaaaa aaagtatttc ttcttatacc 28080 tcatctccca aaaaagagtt atttgtttac aaattccaga ttaatatctg aagatgcaga 28140 gaactgagga gactgtagaa cagcggtccc attgttttgg gcaccagggc ccagtttcgt 28200 ggaagacaat ttttccacag accaggggta ggggatggtt tcgggatgaa acttccactt 28260 cagatcatca ggcattagtt agattctcat aaggaacatg tagcctagat cccttggatg 28320 cacagttcac aatcgagttt gagctcctat gagaatctaa tgctgccact gacctgacag 28380 gaggcagagc tcaggtggtc atactcactc actgctcacc tcctgctgtg cggcctggtt 28440 cctaacaggt catggaccag tatggcccat ggcccggcag ttagggaccc ctgctgtaga 28500 acactggcta ttgaataaca ttggcctgga ttgttattga taactctgaa gtctcacagc 28560 cttqctqqca gccctctqqq acttaqqtaq ctqtcactta aacctqcttq aatttccata 28620 totgagagto ggtaactgtt aggacocagg atttottttt toattgottg toagtatatt 28680 acagaggaga gactatgttt tgtattatgg actttttttc tccttcattt atatttctca 28740 cccaaacact ccttccttgc ttgttgtgtg ctctgggaag tttccacgtg tctgaaatga 28800 ggtgggtagg agcgtggaac tgttcaccag accgcctcat gcagacttct ttccctgagc 28860 ctgtcagctg ggagaaatct gaaaggcctt gcaaagcctt ctgattgaag ttctgatttt 28920 atcctccctt ttgcaacaga cttgcacaaa tgcttctaag caggcattgc aaataggtgc 28980 tgccctgggc ctagggagaa gtggctgcca ttgggaccag tggatgacct gtcctgcctg 29040 tgtgtggcag agtcagggta gcctctggag ttctcctgct cctccttccc cagcctgggc 29100 tcgggcagcc tgagcaggcc tgtctgcgtg agaatgctga caggggagaca agaggcagag 29160 cggatgctga agaagacagc agacatggtg gaagagaaac taaaggcata ggggattaca 29220 gaatacctac tttccttcct ttaagaaatc attcatggga gtgtgaacac actctgtttc 29280 tcatttacag gtggctgcct gattgtcaag tcccaggaca ctttacagtt cttgcttctt 29340 agacttetga cetgeaceag eccetttgaa acceacetee tggttetetg tttetetttg 29400 tacateteca gtaatgteet getggeeece tttgeagaag eetettetgt eeaceaettt 29460 agggttggca ttccctggga tctacccaac ctttgttctt tctgtatcca tactcccacc 29520 ctgagtgacc tcttgtgatt ctaactacta actggatgct aacgagccaa aatctgtctc 29580 totatccctg gcctccctcc cccagctcta gtccagcccc acaatatctc agccagtgct 29640 catcettece tetgtaaaac geagtgatea gtgatgeagt aggtggeace ggetgtetag 29700 tactgccttc tcccttggcc cccaccaggg gagtggtatg tgtattctca aacctggcta 29760 ggccagttgt acttgttgta attatgcagt ttaactaaat atcagggaaa ccgatcaaat 29820 acgaacataa aaaagaagct gttgttttta taaaaactaa gttaaatgtt ttggaaagac 29880 ctqqataaqq ataaqtcttt aaaaattcag ttgtaaaaca ggggataatt acaaaatcca 29940 ttaagcattc tgtattcaaa ttgcttcata aatgtctaaa ttctcattct ttttaaagaa 30000 atcaaatggt aacgtatgaa cagtgaattg tgagtgtagt ttattcagaa aagactatgt 30060 agaattccgg ttagcattcc ctttttgaaa gccttacatt tacaaaaaat tagtgaatga 30120 atatacatct atataaatta aaacatttag tgatgggttt gtcttcctct gtttgattct 30180 cttcttttc taacttctag aataaccaac caatggctgc tgaagcacat cacaggaaag 30240 tttctgtcat aacgttttag agactttacc ccaccagttt gttgcaaagt tcagttgaat 30300 taagtatatg aaatactgta aaaactgtag aagactgtca ggtgatccca gctcatatga 30360 ggatagggta tagttgtcaa aatagaagaa tgatctcaga ttattgatag ataaagatct 30420 gttggcatgt ctcagaatca gagtcttatt gctgaaaatg gctttggata tctgtctcta 30480 ttggccttct caatttatca gttagagagc tgaagcccct aaaggttaag tgagttgctt 30540 atatgcaaga aattcaaatt gccctgtgtt cactttgcct tcatttacac catgctgact 30600 tgagagagaa aaacattttc cttttaagtg gaaagaaaac cctccgaagt cctaattagg 30660 ttccagttaa ttaaggtttg aaaataaggg ctttgcaccc ttggagttga ttccttggtt 30720 cccccgaaaa caagtccatg gaccccagct ttggaaggag gagcacatca atctcccaca 30780 gcaaaggact ctggtgaggt catttataaa tcagctaaat ggccctattc agaagtcact 30840 geatttgttc teetgeeect actgeetgee ttgteeteac aaaaateeat tttteettgg 30900 tgcttttttg agtagcctac tgtttggaat tgttctctga tgctttgttt gcctcagacc 30960 actatgtccg tgcttttggt ggcagtcctt taaaaaaataa aaaataaagt ccatttaagc 31020 tagcctcaat tagagatgag tctgtgcgag ggggtaccat ttatttacac atcatgccct 31080 taggttcaga ataagcgtgt aaaccacaag tttcaccttt ccaagaagtc agtttaccat 31140 gatgactttc cgaatgaatg ggggctgagt gtgcggcact agtatggtga ttgtttgttg 31200 agttagggac ctactagttc agaagtcata gcctcagaac tgtagagcaa cttgaccatt 31260 gtgtatttgc agttggcaac ttagaccgga gctgcctaac ccatgtctga gttagtgagc 31320 ctcagccctc agggccacct agtctggccc cagttccatg aaggccacct actagcagtc 31380 ttgtttaccc tagtgtgctg tcatatatta gcatatgtat atactagttc atatcctaga 31440 actgtggtgg gaaacagata gggaagcact gccttccagg tgggattacc tgctccaaat 31500 gtctccttta cctacagttc aacctagttc taaagaggtt ctaggtacat gaatgactcc 31560 tttgtttcat tgcttagaaa gcaaatgcag ataccaaatg cattcttgtg ctttttggtt 31620 ggatgggttg agtaataccc cttccaggta gtttcttcta tctccatgtt ttctgctgct 31680 aagttaattc ttggacttaa catagatgtt tgttttattt tatttataac atatgtctct 31740 catttctgaa aagggagctc ccataacagg ggcccagact tttttatgtt tgtagtaaaa 31800 ggaatcataa tgctttataa tcatatccaa atcttgagct ttgggagaag gggaactgtg 31860 ggaagtttgc tctctgcctg gttcttgctc agtgattcag gcccaactaa tagactttga 31920 gagtaggggt cacagagtcc cctggcactt ctgcttcttg ggacacgaag cctgttctca 31980 ggcaccttcc cacttaggtc ctttacagag actgcctgac tataatgtga agacaaggcc 32040 tcaggcttct tagccatggc attcagaaaa gataccaagg gagggtggca ggtgccagaa 32100 gaatcccatt atgaaagtgt cttgggaata ttgattgatt tttaggaagc tacacctact 32160 gcctgctggg gttctctctc tagcctcttc ctcatcagtc aggtggcagt acccagaagc 32220 cactctgttt gagggcttcc atgtaaaata agcatgaggt ttgcaggaag ctgtgcacca 32280 tcatgggtcc cctgacaggt ggttaggtga tgtgagcagt tccttctggg tcactgactt 32340 tgggaattca gaggaagttg aagtagtggt ggagaaaacc tgatgttacc atcttcccag 32400 gcaaattact ctcaactcca ggagcttcac aactgcatct tgtataaatc ctacttggtg 32460 caattttgaa acccaaactg caggcagttt ctttgagtgg acttgattgt aaagatagcc 32520 ttgttaatgg aaattatttt taaataccct gggacccaag ctgcagtgga atgctgttat 32580 gtatgacctt gacctgttcc agcctttaag gcagggattg acggatattt tctgtaaagg 32640 accagatagt aaatggttta ggctttgtgg gctgtgcagt ctctgtctct gctactcaac 32700 tctgctgttg tagtgtgaaa acaccagcgt tgctttaaat ggataaatgt ggctgtgttt 32760 caacaaaact ttaagaacac tgagatttga attttatata gttttcacac atcacaaaat 32820 attgttcttc ctttgattat ttttcagcca tttaaaaaatg cataaaccag tcttagctca 32880 tgggtcatac aaaagcaggt ttggcctgtg gtccatactt tgctgacctc tgcttaaaca 32940 gccagctagc aattcagccc tgctatccag tgagctttťa gcagctcatc atcacttcac 33000 agggaagcca ggctgggtaa tggagaacag tcgtgctaag ttaactctca ggatggcttc 33060 atgcaattag gtaaattatt cctttgatta gtaccatgct tatccagtcc aatgggaggt 33120 ggggagtaga ggaatgaatc agtttagcat cagttccctt attccattta caggcaggtc 33180 gctttaatta gcctgaagca aaaggagcag gggttctcat ttcccacttc tgcaagctca 33240 geagetette acagteaggt etteateeca eccaageeca ettgeagaga tgetggetet 33300 gcctcgtgta ggtgcgctga aggtggggac tgctcatggc aaaatgtagc gctaaggaaa 33360 ctgtgtagca tttctccccc acactgcccc cattgccaaa tgtagctgta tgttttgttg 33420 aatctgtttc tgttccttct ctccaataca gtcgctttca agaaatgagc attccagctc 33480 tgctgtttaa tatttgtacc atatatttga tccaaggtag gaaggatggg tacatttatc 33540 ctgtctggct cttccttggt cttattattt atgttgtcac ttaaacacac gaggaagcta 33600 ttgatcacag ggttgagtat atttgtagaa tcattctgtt ttcttagtcg tagagctttt 33660 ctataaataa tataggaaaa taatgagaga gccagcaggc cacacagaaa atgtaaagtg 33720 atgtgacaga actetgeeca tagtgeagtg agetgtettg gagaggacea geteagtete 33780 aggggttcag ggaagatttt ccagcagaag tagtggggca ttaggccttc taaaagactt 33840 gagggtctag ccaggctgca aaggcaagca gactgctggt acaagcatgg gagggatgag 33900 aaatggcaga ttgttccagg gtgtgtggtg tagggtgcag agagagagag gagctagagg 33960 agacacaggc taggccttgg agtctgtagg aatgaaccag ggcagctatg gaatgatttt 34020 aaatatgtaa gtgacatgag cagaactggg ttttagaaag agcctcccaa aagtgaatag 34080 aatagaggaa gtttataatc caagagagaa atgatgaggg cctaacctga ggtagggacc 34140 gtggggtgag agaagatgat ggaccgaccc aagagaggga agaaaatcga caagcctgta 34200 gcaaattgac tctcttgatt agatgcggag gggaggggca ggatcagagg ctagggatca 34260 gggaatcagg tttccagttt aggcacatgg tagtaccacc tggggacacc accgtggtgg 34320 aggtcgagaa gagagatgat gatttccata actaggcctc tccggtcccc tcttcttcct 34380 ttaggaagga agctttatca taaaagtaat atgttctcat gttagaaaat ttagaaaata 34440 caagaatata aagaaaaaat cataatcacc tatagtccca tcacccagaa ataaccatgg 34500 ttaatatttt ggtataattc cttgtgcatt tgccccttat cacttcatag caggagggaa 34560 gggtgtctag cataacatat gtatagtttt tatttatatt ctgctcttaa atattaccta 34620 atgagttttt cctatgtcat taaaaaatct tctaaaaacat tataatacct acataatatt 34680 ctgtcatatg aatatactct taaacattca gccactcccc aattttgaat atttaaatta 34740 gattetgatt tttttggtae tacaaataat agtaceatgg ceatggeeat etgtgttegt 34800 aaatetttga eetgatetet gattatttte ttaggacagt ettagaactg tgatgacage 34860 atcaaggata tggatatatt taagattaat actgaaacat attgccacat tcccttccag 34920 agaggttgta ccaatttata ctccttcagt agtatgtgaa tcagggtacc ttagatggaa 34980 acatetytea ggagttetet geetacaegg agetetygeg eactegegeg etetettttt 35040 gtottagatt atttotttat ototoatatt ttattttoat gagotootot ttacaaagag 35160 ctcaatgtgt cacagacact tttaaaaaaa aaaaaaaaat gaatatataa ataagagtct 35220

gagtttttgg ggacaacaaa taatagtacc atggccaggc catctgtgtt cgtaaatctt 35280 tgacacgata tctgagtatt ttcttaggac agtctcagaa ctgtgaggac agcgtcaagg 35340 atatggatat atataagatt aatactgaaa cacatagcca cactcccctc cagagagggt 35400 gtaccaatat atactccctc agtagtatgt gaatcagggc acacaagatg gaaacatatg 35460 tcaggagttc tctgcgcaca cagagetetg gcgcactcgc gcgcgctctc tatctcgtct 35520 etetetetet etetetetet etetetetet etetetetet etetetetet etetetetet 35580 cgtctctctc tctctctctc tgtctctctc aggtgtctag gtctctgaaa tatcccagtg 35640 gttgtggtct tagattattc cttcatcttt catattttat tttcatgagc tcctctctac 35700 aaagagetea atgtgteaca gaeaettete gttgtgttae ttattttaaa aagtaettae 35760 aagggtccta aaatttaaaa cagctgaaag aggtggttga cagtatcttg ctaaactctt 35820 gctaatgctg agactgggga atgacccctg ccccaagtta aggtcctttc ctctcattag 35880 aatccttaaa gaaacccatt gtgtttgaag tggggctgag aactgttgtt gcattctcag 35940 atcctcagag aacatttgta acttcactag tcttttctct tacctcctgc gtgtattacc 36000 tettgggeat tgtttgagtt ggtetgaeat gaataattat aaggaaatee agttgaaaae 36060 agaategete tgtataatet gtgeteeeat aagaattget aeaettetet tgaaagtagt 36120 agtaaacagt acaggaaggc ttctgctaga agttcaaggc ttccatttaa acattgacga 36180 cttactactt caaccgtgga gatagttcta gagtcagcga ggcttgaaga atattagcct 36240 cctacatttt cccagttacc aattttataa taatattagc aaaattttca tttaaattta 36300 ttcatctcat ttataaagta aatccacage caagaatgtg tgccctctta gctgttcage 36360 actcaggcta tctaggacag cctccgtgga agagagtggg aggaggaagc agtgaggggt 36420 ggaacaaget gcatecetga getttgggga gaacetggga gegtgaattt cageegtege 36480 gggtgttgga atctcccctt tgagaaaaag gaagagacag agattgattt agttagtaca 36540 ctttatggaa tcaaggaaag caatccatgg ttatgcatcc caaggcatga acaatagaca 36600 aacttgaaaa cttgacctaa ttatatataa gcaacactaa ttacagccac ttatgtgtgg 36660 tggccactat ttctggcttg ttcacgagtg cataaaaact aatatgtgtc attaagcatc 36720 agattcattc tgttgagtgg ctcattatta taaccctgaa ctcttcatgt gcttactctc 36780 cttgtaggca agtcacctag tcatttactc atcattttca aaaattagaa ggaatacagg 36840 ttgcattatt ctggaagttg ttaaaaatac agactcagag gtgatatccg accagtacag 36900 gagggttgct tcctgtgtgt tacaaatact gctcacagtt ctgtgaagga gccttaggca 36960 gcagaagaca aactttctac cctcaagctg cttcagcaat ttgagaactg tatgtacttt 37020 aaaaaacacc aataagataa aagcaagggc acagtctctt gaaacagggc tgacagaatc 37080 gcaaacccga tggttatttg gtgggatggg attagggaaa gaaggccagt ttggagggtg 37140 aagccgtgag ccacactgtg atgaaaggga aaaggagctg aaaggtatgg agtacccacg 37200 ctgtgagagg taagggattt atcccctcac tcctctctct gagtgctgaa cccactgaga 37260 aatagtcatg catatcagac tgagattatt ccatctatta ctgataccgt ttgggttaga 37320 aggcaatcta acagaacagc ccagaagtag ttaatgtaaa aagaaactga ttggagtgat 37380 tagtgagagc agaaagtagc cagagacaga gagaaccatg teetetatea gaetggaact 37440 ggggatggcc cttgtgcgac cttctctgct aggtgccctt ccagtgcagg gtctgctggt 37500 gaggaccagt ggctaatgct tctgctcttg gtcagaacag ccagtgcaga tcctcagaag 37560 aactetgaaa geaaaattga eteecaceee aettetagaa geattteaet tgeettetgg 37620 ttotttotgo ttgoctatat coaggotoat ttottataga tgaagaaagt cotaccocca 37680 gcctactcct ccaccttcac cctgtgacct tctccacctt caccctgtga ccttctaggt 37740 tcaccttttg aagctgaaga ttgaaactcc aaatcctgct gcagagaagt tcacatttgt 37800 ttttcctagg cagggccagc ccatccaccc ctccttccta gggtttccct gatactttat 37860 ttatacctgt tacctgtctt tatcacactg tcacattgtc ttgccatttt ccttttgctt 37920 ccctgtctcc ttttctaaga ttgtgagttt cttaagggta aagacaacat cttgtccacc 37980 tttgtatccc cagcccctgc ccagtgctca tttttaacca ggcatttcaa ggtctttaaa 38040 catcactata catattgatc ttttaaaaaa gatgatggta gctgtgttca ggagagtgga 38100 ttgtagctct agaagagagg cgtgtttata taagaggatt agatacatat tatgagccag 38160 ggcggttttc tttccttgtg aatgaaaggg ctgggtgttt gattatttgc tggggcatcc 38220 agggtttaga acaaggtata atgaggactt tctcaaggtg gagttgcctg aacaggtgtg 38280 aggagccagg aaacttcggc acccccaggg cctggcagtg cttctgaggc atcctgagca 38340 cttcggtgct cacttctcag accaactgtg tccccttcag gggagcatgg tggaaggggc 38400 actccagggg aagggaaaga gaccccagtg tgccatgctg ggaagggaga tgctggcctg 38460 ctggcatgga aaggtaggga ggcaccaaac ttcagaaggt tctctagggt cagctaccat 38520 tagctgttag tccctagacc catgatgggg atgaaagcga tttgtgtatc aaggtggctg 38580 tgcagtctaa tgctccttct gcaaaattct gatcagaacc tatttttgct tttaatggag 38640 ataattccca taagacagag gttctgtgtt agctgctgct ggactgtcta agagaggaag 38700 ataacttata teeeggttga agttgaaagt gtgeeeagat gaeteaaace taagtgeete 38760 gcatctccag gggacatgaa gtgagacata gggttcctgc actgaccagg tgataggaac 38820 ttccaggggt gagcagaacc ccagccagca ccccttgttc ctctcagaga tgtgaacctt 38880 tcaagttagg ggccttgaca aatggaacag aatttggctc ctctaggacc ctggcttttg 38940 ggtaattata ctcataatta ggcagcactt ggactctcct ctttctgttc acgggacaca 39000

etgeaegtee ttgeeetgee tecatgteae acteeaegte acteatatgt gageeaaaca 39060 gctacatcag agacgtggaa ttctttgacg ttagtaaaac ctgcattagg gaaggggaac 39120 cettgeaget gaccettaga titaaaceat gactgettet tgggacagge ceagtitatt 39180 teggttttea ttgtteagtg agetgggget etgetgegaa ggeeagaate ettttgttet 39240 gtttgctctc tgtcctaaag gctgctgcca gactgagttt ccccaaatgc tgctttcccc 39300 ttgccactca agagcctgca gtcttattaa gtaaatatca tggatcagta agatttccaa 39360 aactgttttg aagacaagat ataataagat tgttgccttt ttactttacc aagcaaggac 39420 attttcttta aaaagccagt taccatctac tatcttcatt attttataaa tgaaaacatt 39480 ttagcatgaa aacaaagacg acataatttc acaatatgga gcagtctttt acgttgactt 39540 ggttgaactt ggtggaaacc tatttaattg tectatettt tteteatttt gtttgatete 39600 aaaccageet gtgagaaega etggatttet acateaaate taagtgeeee ageetttggg 39660 ggcctctgtc aggtagcctg gtgtgggtgt tccctgcttc ccactaaccc ctatccttcc 39720 tectecetee tgeettgeet etgtagagte tgggeeteea tttgateeee geaaceetae 39780 acacctcact ccctctagaa gcctgctcca aatagacttc ctcttcctcc aatatctctg 39840 gccccattcc ccatctctcc cctaggtgcc tggtgcggaa caccatcagc tttcattcgt 39900 tttgttttgc ggttttcttt ctttactcct ttttattttc ctccctgcct gcattcttga 39960 ctataactgt taagaaggca gatgtcttac tgttgcttcc ttcagatttg taaatctagc 40020 atggtgctgg gcacagaaga ggtatgcagt cetttagtgg ggcatcacte ggctagetca 40080 gagetgttea cagtgatetg atgteacete tgaggteeat gggtgeeeag ggacaetgtg 40140 cccattgtat tgtctacaag gtgaaaatgt ggtactgctc ttcctcaaga aactcccaca 40200 tttttaaaag agtgatagta ttgtagcacg gtttgttttg ctttataata cttcttgatt 40260 cccttgttaa gtgacatggc agatattttt agactaaaga caatttaaga gctttaaatt 40320 attttaattt tataacttta aaatatteet tttgatttae etttttaatt geceacatgt 40380 tttttttagta tctaccaggt acaaggtaat ctgctaggtg tccgggacaa agacaaggtt 40440 agaacatggt cacagcactc agagtggctt actgtctcct ggaagacgta gaggcagatg 40500 qqacaqqqqt qcacaqqaaq agcctqgaca gcaqqtqtqc acqtgqctqc tttcqtqttc 40560 tacaqtaaca ccaqctqtqq tttqaaqqqq ccactttcaa agtcaqttag aaatgtggga 40620 actgtttaaa agttttctcc tagcaacttg ctcttatact agaaatgcta aaaacaaatt 40680 agaaattatt taattgctcc ttgaatcgtg acctcctggg gtaaaggaaa tctgccagag 40740 tagatggaga tgagggcaac acccagggag ggaatcccaa caggtttctt atctgcttgt 40800 cagcatgagg ctggtagcct cctaaataag aagatgtgct aatgaatagc agagtctact 40860 ggtttcgaag cacatttgaa cagagagctg tgactgagct ctgagaatgc tggcttggcc 40920 attaggcagt ttgaaactga tttgctactg tcagtttcga cccgtaaata acagggcgct 40980 ctcccctttc attctcctgc ctgccacctg ccagccaagc tctcaggctt acccacctcc 41040 ctggtggcta tgccagagca cagctgagct cacctcgagg ggagcagagc tcctatcttt 41100 cctggaccct cctggctgcc tagtttcctg gctgggattc ctgacccctg gttgccaaga 41160 ctaccttgtt ggtccctgtg gagttctgtc ctgtttgccc agaggcctcg ctcagacttg 41220 ttcctttttg gtacatgttt ccactccaga ctgccccagg ccccaactct cagctctcct 41280 gttgctacca gcttccagtc aatgactgtt tatttgaaca tctcctgcgc aacaagagaa 41340 tgtagtgatc aagagcatgg accetgggte agactgeetg ggttetgate eegacteeet 41400 cacttagctg tgtgactcta actcttctgt gcctcagttt ccttgtcagt gaaatggaga 41460 gcataacagt acctacgtta taggaatatt aggttagatg agatgtaccc gtaaaacact 41520 tggaacagtg cctgacacat agcaagcacc cagcagggat tagctgtgtg gccagatggt 41580 gagaaagggc ccacttctgt cttcacagaa gagctacttt aacacagagg tgaacttgga 41640 aggactacag taaacgatgg tggccatcag cagccatggc atggagacat cgcctccttt 41700 atgatacttc cagtcgatct gggaggtggg ggaggatttg aaatgtaaat gcaaggcaga 41760 gtgagcctca ttgccccctg cagggaagca gaacagtctg gtttggctag gtccctgaag 41820 ggagctccgt ggtgagggat cagcctaggc atggtggtgc tgagttcctt aatggggtaa 41880 gatttgggag caaggaaggc aaagggatgc agctctgaac atcacgcccc aagtcacgca 41940 aatgtgaget geaaagtatt teateetgtt ttgataacta ggeeagagtg cateacacee 42000 gctaacgttg gtgcagctgg aatgtttcca gtttttgctg ttataaataa cactgcaatt 42060 aatactctta tgcataaaat tcaaaaatca ttttggatta tttccttagg agtacattct 42120 taaaattact agattgaagg aaattaactt ttttttctgt gctacttttc tctttcttac 42180 taccttttat tattttatta taaaagtaat acatatttat tttataaaaa tttagaaatt 42240 gaccaaaagc agccattgtt cacctatcac tgagtaataa catttttcta tatatcctaa 42300 ggcgtgtacg tgtacatttt tagagctttt gactttgaga ttacagtcac acattgctta 42360 atgacaggga cacattcaga gaaatatgtc gttaagtgat tttgtcagtg tgcaacatca 42420 tagggtgtac ttagactaac ctagatggga tagcctacga cccacctagg ctttgtggtt 42480 tacacagttg ctgctcctag tctacagacc tgtacagcat gtgactgtgc tgaatactcc 42540 aggcagttgg aacaagtgct atgtatttgt acacttaaac gtagaaaagc acaataaaaa 42600 tatggtattc taatcttatg ggaccactgg cagatatggg gcccatcgtt ggccaaaact 42660 ttcttaatgc agcacatgac tgaattttcc agaaaggtta gactaattta ggttttcctc 42720 agcaggaaac aatagtgcat tgttactgct tctcactaaa ttgagagttt gttaatacga 42780

tagattggaa attgtgtttc attattgctt tgactcgcat ttgttttcct gcttgtgggc 42840 tcaatcaact cttcaatcct ctttttgcca tttctgtgaa agggcacatt ttaccatttt 42900 atatggtatc actagaatct tataatacct taagcactag acctaccagc cacatttagc 42960 taaaagcact tttttccctg ctaaggtata cttacataca gtaaaatcca ccctttttag 43020 tgtacagttc tgcaagctac acgtatagtc atgtaattgc caccacaatc aagatacaga 43080 acaattccat caccccagaa aattcccacg tgcccctctg tagtcagttc ctcttcccta 43140 gcctcagccc ctggcaacca ttaacctgtt ttgcctcttt atagttttgc ctttccagaa 43200 tgtcacacaa atggaatcat teegttggta geattttaag tetggeetgt tteaettage 43260 atgaaagtgc atttgagggt cgtccatgtt gttgtgtgta tcagtggtca ttcccttttg 43320 ttgcagagta gtattctgtt gtatagatat accacagttt gtttatccac ttaccagttg 43380 aagaatattt ggctagtttc cagtttttgg caatatgaat aatgctgtat ttgcctacag 43440 gcttttgtat gaccattttt tccattttac ttgggtaaat atttggaata agattgctcg 43500 gtcatatggt taagtgtata tttaacttca taaagaactt ccagttttcc aaagtgacta 43560 taccactttg catteteate ageaattttt tgtttgtttg tttgttttg tttttgagat 43620 ggagtttcgc tcttgttgcc caggctggag tgcaatggta caatcttggc tcactgcaac 43680 ctccgcctcc tgggttcaag tgattctcct gcctcagcct cctgagtagt tgggattata 43740 ggcatgtgcc accacgccca gcttattttt tgtatttaat agagatgggg tttcaccata 43800 ttggtcagtc tggtctcaaa ctcctgacct caggtgatct acccacctcg gcctctcaaa 43860 gtgctgggat tacaggcgtg agccaccatg gccagctgag aattctattt cttatgtgct 43920 gcatagtggt atttcattgt ggttttaatt tgaatttccc taatgacaaa ttctgttgag 44040 catcttttca tatgtatact tgctgtctgc atatcttctt tggtgaagtg tctgttcata 44100 tettttgece atttttaatt gggttgtttg gtttettatt aetgagtttg gagaattggt 44160 gtgtgtgttt gtttgtttgt ttgtttgttt gtttgtttgt tttttgagat agtcttgcac 44220 tategeecag getggagtte agtggtgeaa teteagetea etgeateete taeeteetgg 44280 gttegagtga tteteetgee teageeteee aagtagetgg gattacagae aaceaceace 44340 acgcccggct aattatttta tatttttagt agagatgagg tttcactatg ttggccaggc 44400 ttgtctcaaa ctcctgacct cgtgatctgt ccacctcggc ctcccaaagt gctgggatta 44460 caggcatgaa ctaccacgcc tggcctggaa aggattttta aaaatatttt agatacaaat 44520 tettetetet ceattetete tggettatet ttteetgtet tttgaaaage agaaattttt 44640 cattgttatg aagtccaatt tatcaatcta ttttatggat tgtgcttttg gtgtcatatc 44700 taagaaacct ttgactaacc caaggtcaga aagattttca tctgttttct tctgaaggtt 44760 ttataatttt aggatttaca ttttagtttc ttcctttttt aaaacatatt gcccaggcct 44820 agaagtttct tttggaaaac agttgcacct gagaagattt gggatggagt tggtcctagg 44880 agcettgeca ggeatgatge tetetgtgag ceatetgaaa aggaggtgtg tgeettagaa 44940 gttgcccgag gggtggcttt taaacagata ccaggcttct ctggcttaag atttggcatc 45000 aaactgaaga ttgtatcatt tgaaaagagg gtatgggatg attagagaaa aacctccaaa 45060 ctttctagat aagtccttct aactgttgca caaagttgaa atgaagaatg gtgccaaaca 45120 caggactttg ccgattacat gtgaacaccc atgtcagtga ctcacccaat catgctttaa 45180 tctcataact gagaggcttt aaaaaattat agtcaacaag gcagcttgct agttatgact 45240 gccattggaa tggagttttc ctcagaacag ctggagtgta atgtggtggg aagaaagcct 45300 ggtgtgggtg agagaccaag gattgcttgc ctgggaagga tgtgcagcta atgtttgatg 45360 gaaatctgtg agatgaccaa cctcagccaa gctacataga ggccctccat acactgcagc 45420 cgaagtgctc agaaaacaac aatgataatt ggcactgtat caccgcaaga gagataaaac 45480 acagetetgt etteaagaaa tgeatggtee aetetgtgat eeatgetagg ttgtagaage 45540 tggcagaaga ttccagttcc agtaaggcaa ggcagttgag agcagcctgg aaatggcttc 45600 tccaagaatg tcccaggcag agcattgccg tgggttggtt tgttctggaa tgtacaggcc 45660 attggtgtgg ctgtgtcaga ggaagggctc ccagtggtgg tgggaaatgt tggggatgta 45720 accagggctg atctggagga acttgtttgc tctgccttga aatatgagtg ttttcggctg 45780 ggcacggtgg ctcacaccta taacccagca ctttgggagg ccgaggcggg tggatcacaa 45840 ggtcaggaga tcgagaccat cctggctaac atggtgaaac cccatctcta ctaaaaatac 45900 aaaaaattag ccgggcgtgg tggcggggcgc ctgtggtccc agctatttgg gaggctgagg 45960 caggagaagg gegtgaaccc gggaggegga gettgeagtg agecgagatg gegeeactge 46020 acttcagcct gggtgacaga gcaagactct gtctcaaaaa gaaaaaaaga aatatgaatg 46080 ttttcttgaa ttcaacttgg tgctgttgaa gcattttaca tataggagtt gtgggatggg 46140 acctettttt tagaaagate tetttggeag etetgtagag aatgagttgg aaggggteaa 46200 ggtgtagaca tcaaggaagc cagttagatg gctgtggctg tatgcaggtg aggccacaca 46260 gctgacagga gggaacagat gagagaaqtg gaatcagaac cacaaaaggg agggggaca 46320 cctggatatg cccaggtttc tgacaggcag gaagacgtgc cacccaggag catcatcggc 46380 accacccagg ggaggaagag caggcattgg gtggagaccc tccaggcttg aggtgcgtga 46440 gctgcccact taaagacgct tgccaggtgg ctggaccgga agtctgctgc tcctcttcta 46500 ccttgccaca ggctgctgcc tctgagttaa agagacatgg gaagcatcgg gattgctcat 46560

acctcccaaa gtacagcagg aaggactaga agcaatatga aatctaattg gcaagaccac 46620 ggtgagcaca caggcactta ggagcagcac gtggcaccca tgaaagcctc catcccctga 46680 cagtgagccc agaggctact gtggagcagg aggaaaccag ccgtccttcc tccttgcttg 46740 caccetecet ceteacetee tactetetgt etttecaget gagecettet egtttattta 46800 aaaaaaaaa aaaaaaaaa aaagggaatt cactcccagt ccttttgaaa cccaacatgt 46860 cagtgataga tgagggcgta ttctgtaact tcaaaggaga aaagttgagt gagtgaatgt 46920 gggccagagg agttgaaaag tccaagggaa caggagaccc atggggtgac cccaccatca 46980 ggaggagtgc cccccatccc acccctgctg gtgccatgca gaggcacaga caatgccact 47040 ttcaataaat catgaaggat tctgaatgcc tggttttgtc ccattttcaa tgggccttgg 47100 gcatattgct cagatatagc cagccatttg tgcaaggttc ccagctactc aaaggctcaa 47160 agtogagtgc totttocact atataatgga gtottoacat atgtgatttt gggggagatg 47220 ttttcagatt tccatagcta gtcatagtaa agatgacctc gtgggcagtt caggccattg 47280 teceettete acateeagee tittgagtaag getgegetti eaggagtate eatgeageae 47340 ctaattcaat cacacatetg accectgeet etetttegea etggeecett etetgtgete 47400 agtgtgctgc tgggggcctc tgcacaaacc cggctgttct ggaggcgtcc tgtgctaagc 47460 agagageact tggccatttt ccccactttc tgaattcagg gecccctggt gaatctggcg 47520 tggggatggc tgcctgttct catgaggctg cgcacatgaa ggcgcctgtt ggaagcgcct 47580 tttaagaatc cccaggttgt ttccatcctg gagtcttgca aagaaagagg aagaataacc 47640 tggggtcatt taagggctgg catggtcatt tccttaatca tctgtgacca ctgagagcct 47700 tattttctat aaagaagcac agaggettet ttggetttge tttagtaaca acaaacaget 47760 agaatttatt gagageetge agtttgeeaa gtgettteae aeattegate atttaateet 47820 caagcetttt accettgttt agagatgagg aaactgagae ttgagettaa acaettgtea 47880 aaactcacat agctagaggt ggcagaacta ggatggaatc atttctcttt ttatttgagg 47940 cagggtettg etetgetgee egggetggag tgeagtggea tgaacatgge teactgeagt 48000 cctcctaggc tcgagtgatc ctcccacctc agcctcctga gtagctggga ttataggcac 48060 gtgtcttcat gctcagctaa tttttttgag tttagtagag ataaagtctt accgtgttgc 48120 ccaggctggt ctccaactcc tgggctcagg cagtccttct gcctctgcac ccccatagtg 48180 ttggaactac aggtgttgtg agcgactggg ccaggactag gcccagtcta tttcttattc 48240 tgcttacttt ttcatttctc tcggtagatg ttgatgttgt tttatattct tctaaaaatc 48300 taaaaaatgg atcaagtcct gaccttagga ttatttgaag agctatttaa aatgctgtat 48360 gattccattt aggtaacatc ctcaaaatga cagatttata gagaaggaga acaggtaggt 48420 agttgccagg agctagggat ggcggggga gcagagggtg gcccaaggga gagctgtgta 48480 aggatgggac agtctgtatg tagattgcca tggcagttac acaaatgtac gtgtgtgacc 48540 aaaatggcat aaaactagac acacccatta tgccaatgtc agtttcctgc gtttgatatt 48600 gtgctataat tatgtaagat ggaaccttgg gtggaaattg gagatgggca cgtggaacct 48660 ttctatacta cctttgcaat ttcctgaagc tataattatc tcagaataaa aagtgggttg 48720 tttttttttt aatteetetg tgtgeaacae eageattgee eecaggaaat ageeaggtet 48780 cagttcaggg gctgcttgcc atcagaaagc aagccacatc acacagtcaa agttggccta 48840 gaagtggggc acaaactaga agagggtcca ggttttatcg cctgtcagat gtgagcttag 48900 gctctctcga cttatgggaa agcactgaac tgagagtcag ggcccccggg ctcaagtatc 48960 agggetgeag ttgtgtgace cagageaage tteteaactt etgtgageet ceagetteee 49020 agctgtaaag taggcatggt aactgcaccc accctgtgag tctggcagaa tgtgttgatg 49080 tgcttagtat catcttcgat accacgatca atgttattat tttatctttt cccaatttta 49140 ctcccaactt tgcagtcaga ccaatctctt gtgtattcat ggaacattga atattcattc 49200 ttattttctc tgcttttgat catttattcc ttcaacaatt attattgagc acctgttttg 49260 ttgaaaattc tggaaggcac tagggataca ttgatggaca tgccccatgt ggtctttgcc 49320 ccgggagagc taaaggtctg ttttttccc catcacctgg aatctctcct gagtgcatcc 49380 ategtteaga teettgetgt eetgeeagae etgaggeete atetaeacea tgeaggeece 49440 tctaccagat cattctctaa gctccctcag tattagaggc agtgcagctc agtcatcttt 49500 gccaaccttt atcctgaacc tcccatggga cctggcatgg agctgcacac cacagagaga 49560 atgcttagca ggtgcttgcc cacagaactg tgaaaggaga gcccgaagga gacttagaca 49620 ggagcctttt gaggctttca ttttacagat gaagtcctga ataggggccc tggactaaat 49680 aataggaagt ggctataagg gtccccaacc catttttaat aggataatgc tagttcttat 49740 attgatetta attittgitg tigtittggg tittittet tialitietgt teigeagitt 49800 ttggactagc tgactgacat ttcctctttt aaccttttac agaccctgaa agaagctcta 49860 gttcaggtct tattactact tagctgtgtg actgggccac aactgggggc aggttcattg 49920 aattgaaaag gtgaagccaa cctatctctc acctgctctc cctgagtgga ctcacctagc 49980 acctgcaggc tccaagctt 49999

<210> 16

<211> 49999

<212> DNA

<213> Homo sapiens

<400> 16 gacattgeet ggagggagee cacceaggea teccetteet ceagteeage etetecacet 60 gcaactgggt gggtcagtct actgagctct cacctgattc ttcagcgccc accttaattg 120 acagtgagcc ttgaggaggc tgacattett aatgecattt geagttetet gttagaatet 180 agagaagggg aaaggtaaat tgttgcaact tgcagcctcc aacacagtgt ccctgtttgt 240 gggagaagaa acaggaagtg tggcccagta ggaaatgcca agactttaga gccgtatggg 300 tttgagttcc atttccaggt tggccggggt tgatttatgt attgccagac cttgggcagg 360 tcagttactt aacctccctg agcctcagtt ccctcacctt taagatagga gcagtgatac 420 ctggacactt gttcctggca cagtctctgg ttgcatgtgg aacctgtgat tcctactgct 480 tatcacgggg ccctgcattg ccttaactta aagcctttgt ggggatcaca aagagtaaac 540 ttacactggg gtttctctac agggacttaa aatctagttg ggacaatatg attgttaaac 600 aagtacacaq ctagagacat gtttcaactt gagaataact gagaagaatc aggccatgat 660 agaagcaatt ttcatgtatc cagactgtca gaagccagcc ctctgccatg ctccaacagg 720 ctggggtggc ctcttccttc cccaggcaga gattaatgga caagttgtta ctagtgctga 780 ggttctgggc agcttccttg tggaggcaca tctgttgacc cagcagggcc ttggaagctt 840 tttttcagtc gtgagcttca tctagtggca tagggcctcc ctgatgctgg tgctctggag 900 ctagcgtcac tgggtcataa aatcagggct gccttgattt tatcaagggc tgaccccgtg 960 tcagcacagc cacaggagag cagtgtagtg gtagtggggc tgctgaggca gacagcaagg 1020 ctttgaagca ttgtatcttc ctgctgcggc ccaaggagtc ctacagaaag caagccacag 1080 agagagtgtt tcccagatac tgctcaggta aagaaattgg accttattgt tgtagaaatt 1140 actcaggttt tagagtgatc acatttggaa atattgagtc ccaatcagct tgttccagca 1200 tgtcatgttt tgaattctga tctcaactca ttatcaggaa taacctctgg ccttactgta 1260 taatacatca agaacatcat tgagtttccg ctatagctag gcactgttat tatctctttt 1320 ttacatagga ggcacctaag gtaaaagaga ttacatacta acaggaagta aagctgggat 1380 tcaaaaccca qcaqcctaaa gagqctgtac cctttacttc tctactaagc agcccctgt 1440 tattggggtt ttatttttga gatagagtgt cactettgee caggetggag tgeagtggea 1500 caatcttggc tcactgtaac ctctgccttc caggttcaag agatttcctg cctcagcctc 1560 ctgagtagct gggattacag gcgtgagcca ccgcgcctgg cctgtcattg gttgttttca 1620 taggtagaag tgttcacaag cagaagttcc ttccttttgt caaaggtgtt tccctggcag 1680 aaaggtggaa gcaagagcat aaactctgtc tgacaggcag aaaggtagac tagaagatct 1740 agactagact aaaaagttag actttgagat cctctgtctg tcccctgagt tctagcccta 1800 cagcetetag agagattaca tggcagetag agggaaaaca agtttetget taatgaaaac 1860 attcccctaa gattattgtg aaacttattt ttttaacatt taacattgtg tctagtttct 1920 taaatgattt tcaactgtga gattatccaa ggagtttttt attaccaaag ctaatttttc 1980 atagttagca ttacaaatag aaagtttgtt cattttcctt ctttttatcc tttccttccc 2040 cccgcgcccc ccccccccgc ttttattaca tagagacagg gcctcactct gttgccaggc 2100 tagagtgcaa tggcgtgatc atagctcagt gccgcctcaa atttctgggc ttaaatgacc 2160 ctcccacttc agcctcctga gtagctggga ccacaggtgc atgcctgtgc tgatttttaa 2220 atgttttgta gagacggagg tetegetetg ttgeecagge tgeteteaaa eteatageet 2280 ccagcagtcc ttccatctca gctcccaaag tgctgtgatt acagacgtga gccacctcac 2340 ccagccccat tttccttctt aatggatcct ggcccttcca aataccctcc atttggtctt 2400 tgtatttcat attaacagta aacttttgtc tgtactgttt taaacttcac aatacgcgtg 2460 ggttctttag tttttaccac agttaaaaca gcatctctta gactgatatg tcattctgta 2520 aagaaataga ctatctaaga cacaactaat tatcttggaa taggaacttc aggtaacccc 2580 aggtatgggc cccataggtg tcccttccag actgttctga gcgaccaatt aagagatgtc 2640 agatcaatgg gcattttgtg gctggatggt agtggaaagt gattcttcta ccaggaggtg 2700 ctgctaaccc cattgttgca ggttgaagcc agggtgtagg agcaggggag caggcagctg 2760 gggaaggagg tagattgget geeccaggte cagaagggae etgagatgge agtgtagtte 2820 tggaatatgt tatccagata tttggccttg tctgggagga aggaagcaga attagcacgg 2880 aatcaagtcc tgaactttga tgggagctct tagctgcgta agacagcctt atgcaggaga 2940 actetteact gecaettggt teteattaaa acatetgaag atgtgageae tggetettet 3000 gaaatcgtag agcgtctctt ctaactgata tagcaggggc ttattatgag tgctttcttc 3060 cagcaaacct agaaagtgtc tcacattcac ccgtaaaaca aaccatgagg acaaccatag 3120 aggaactcag ctctgtttaa caggtagaaa gtctaggacc atcggaaccc caccaaccaac 3180 cccagaatct gggagagaac agagacaagg tcagagctgc tggctccccg cttggggtta 3240 tataactccc cgactcctca agtccctgga aactgaggcc aattccctgg aagatcattc 3300 tgttctctgc tgttttttca agaatacagc cagcttgatc actggctctg agtattgtat 3360 gggaatgtcc cgttttcttt tttttccatg aactgaatgc ctaccattat ggtcattgtt 3420 tcatcagtct gtgtttaaac ttgcctggat ctcatatttt tatgtatgtt tggcttatat 3480 tttgaagaac tttgctttgt ttatatatac cctcatctgt ttccaaaaag attttgagag 3540

gacttacaac aaaggaaatg aacagtgagc tgcatttaaa taatagaaag acagaaaatc 3600

agaatgaagg agaggagtgt cagaaagaat ttgacatctg taagggtggg cacagctcct 3660 gtgactgggc ttcatgtttt ctgatttcaa tatcacagat gcagtcgtcc tgcttggtgg 3720 cgtgggggag ggagagttta caaggttatc tcttacaaca aaccccatcg aacattgaga 3780 attatttttc ttagcaccta aaagcagctt ctcacttaag gcttgatatt ggaaatattc 3840 agtgttacaa cagtggacag cgtttgcatt ttgggcaaat gaggaaagag ttttttgttt 3900 tttgtttttt ttttttggag acttgtccag gccttgccca gttactggcc cgtgttcttg 3960 ceteteteat quetqaqate geagtggeae catettgget caetgeaace teegeeteet 4020 qqqttcaaqc qattctcctq cctcaqcctc ccgaqtaqct gggattacaa gtgcccgcca 4080 ccacgcccag ctaatttttg tatttttagt agagatgggg tttcaccatg ttggccaggc 4140 tgatcttgaa ctcctgactt caggtgatcc acctgccttg gcctcccaaa gtgatgggat 4200 tataggcatg agccaccgcg cccagccagg aaagagattt tataaggcta tttcttaaga 4260 caaaatctgg tgaaaataga ggaacatact aacccaccct tgaggaaggc aggtgctaga 4320 gagccaaget catatgatet acacacataa etateeteta teetaatetg attecaggat 4380 aaagtgtaga ccatctctga gtgggtggag agcctgtcgc ttgggctact tctgtttccc 4440 ttccctttgc tgagtgtttg accagggctg tgtagctgtg ggaggcttcc acaaggtctg 4500 cagettgggt aggaceaetg etgagggeag gaceaeaage tttatttaga aageagatag 4560 ataggtaaca gaattagtat attctatatg caaggaaatc tagatagcat ctttcccagg 4620 tgcacaacca tctctgtgca ttggaagggg tgatatgcag ttcctgcagt cagcactggc 4680 acttteetgt ggaageaget ttgggtaact geatteette gacagtagtt ggeetgagge 4740 ccctgagctc tgagcacaaa tggtttgata aggtgatgtt ctaacgcagt catcctcttt 4800 ggccatgaaa atcctcaaaa attctccagc tttgattagg atgagcagat tggctgcact 4860 ctctctccag ctggctgcat gtgacacacg cagacttgct catcatgctt tgtattcact 4920 gttgcatatt gctcaggcac gtgagaggca agaacatggc ccactaactg ggcaggtcct 4980 gategggaag etgetgaggt aaaggtgete etgttetget aaaggagace etgggateag 5040 ggacgagete tteettgetg ggeteaceea gtaatacagg tegtgtggga cagtggtgag 5100 ccgaactctc ctgccataga cgtgctggtg agcaatggag tcaccttcag aagaggaggc 5160 ggcttgacct gggggcatga atgctaccac caggcccttt tctcctggga ctggctcctt 5220 cctacagage aaccetecet gtgggttgae catageteca aagacagaeg ttttttette 5280 tcagaaagta aaacctcagc attgaagaat ccttgtcctg tcatttttaa ccttaatgag 5340 aacagagcaa gcctctggaa caaggtgcag cgcagtcagg agaagtggct ttaagtgaaa 5400 acacagetgt ggggtttaca gaeggegetg eagggaggea teatecaatg ggageggeea 5460 gcctcgctat agactttcca acactaatga atcgggaact ccatgctgaa tagggtttag 5520 tttgatgggt ccctgtgcca gcagaaggat gtatttttct tgaaagacca aggtgccaga 5580 aatctccatg attacgttac tggagaaagg ttcttttttg tggtttgtga agttgagcgt 5640 caggactgca ggattctctt gctctttctc actcttattt tttccaggtc agaaccagag 5700 cttggggtgg ggaggaaaat cctgctgaat gagcaagttc tttcttaaaa agctctctcc 5760 aagtccaaaa agacttcagt ggacttagga gaaagaaatt taatacattg ccatagaatc 5820 gtcattaacc aagttaaagc aaagtccaca gcatctttgt cttataaaag aaagcaaaaa 5880 ggagatggaa aaaaagaaat tatacttagg aaatccaaac caaacagtga acactaaaga 5940 agaaaaactc aagatcatct ctgaaaatgt gattttcttc taatcagatt tttctattaa 6000 aaaccaaggc tgcaggtaga agtaactttt ctgatctttt aaattctgcc ataaatggca 6060 tagctgaaat gtttgaactg tgctaggatt taccactttc agcttaagga agagttggac 6120 accetgtaag acceagtgga etatgagggg aagagteaac egtggagagg etggaggett 6180 cccaggccgg ccttgacctg tgtttgaacc ttggtcctaa taactagcag attgaagcaa 6240 attcacagge etcetggaga acceatgttg gtttgaactg gageaateet ggeeaaataa 6300 ctcacactgt gctcttacca gtgacctccc tcattacacc cctgtgaggg gagctctgag 6360 ctagcatcct aggttcccct gctcattcat ggagtagtct gcagagaaag ctgaatggct 6420 ctgtcctgct ggggctgtaa gtaccttcca ggagacgggc agagagagac ttggttgtcc 6480 atgagaggtc atcttggagg tattgcgaac aaaacaggga attcctaaac ttttaaactc 6540 atttttttgc ccttccaagg tcaggccagg acttttccaa agcctcgaaa cctctgatgt 6600 ggcgtcttcc ctaactgatg gagtttagtg cctagtggcc cttgcatgac gttctccaag 6660 tatggctgtt tgacaaagct gcctgtgtgc ctgggccagc caaagatcta cctgttcagt 6720 agcccagagg gacccctggc atgettgcct agccacactt teetgtettg tetegteacg 6780 cttctggtta ttcttatgaa tgtagcctgg cccactgtct tcaccaggct gggatccaaa 6840 ataaggtcac atatetttta atagttaeat taaaagaete agtggaeaee eeteettetg 6900 cttacctagg acattgtttc tgcccctaag ttctccctaa agtgccatcc ccaagcagca 6960 ataatctgag cagcctgagg aagctgtaca tagtcctcag tcactcattc ttgttaccca 7020 cctgttgcca tctgctggga gggtcgcctt gctgtctcca ttgtcatcct acccagaaag 7080 ctcagacggg cggaaggagg gcctctcaaa ggcccaacaa ccccaacagg gcctgcatcc 7140 catgitccca cagagictgg ggaagatict cctctcccaa gggtcctagt cccttcaact 7200 catccaggct cctagagctc acccacgcga ttctcttaag gccagtttcc tgggggcccc 7260 accetagage aggaggeeta ggteeaaagg ggaeeeagtg gtagteteat getetggeeg 7320 cctggagcct gccctcctgt gtgacctcag cctgagcccc tgaaaggaga aggctctccc 7380

attttctgcc ctggggagac tgccctttcc ttgttgggat gaaagccttg cctctaactg 7440 aaccettttg aaggetteeg eectetgetg gtggaagetg acagageaac ettgttgttg 7500 cctcttgggt ccttcacttc cttccctctt cactcaatac caggaccgtt gtgcagttgg 7560 aaactgtcca cccagggaag cctgttcctg gggaaaggat tgggtagtgg tgagctctcc 7620 tgcttgacat ggcagctgcc tctggagaga gaaagacctt gtgaagtctg agtggctgcc 7680 attettgcag getgacttcc caagetgage tgetetgtgg gtggtccctg caggtggtga 7740 ttagggccag agcgctgctg ctgcctggtt ccttgccgtg cctgatagct aggaagtatc 7800 tagtgagcat tgttgaggga aggagcttgt gcctcttgag ggtgctgaca agatggcaac 7860 acctgaacac tgagagtgtc tgagccacag ctggtcatct ggtggcaatt actgagcagg 7920 aggcagacgt gaggcagaat ttatttactg aagaaaaaga aattattttg aaggaatgac 7980 attggacacc tgctgtgaca gtgataagga caccgattgc ccaggagacc tggtgaagcc 8040 accettggat tetetggggg aaatacetet ggcatteeag egaaggggaa aacaaaagat 8100 cagggccact ttgacagagg agggacaggc aggaagggct cccctggaag caggtggagc 8160 atgaggaagg gcacagaggc ctaagagagc ctggtctgct ctgaacccct cagggaagtg 8220 gaccgcqtcq gggaqtgcat ggagctctgc aggagctgga gagtgaccct tccctgtcct 8280 gtaagactcc ttctgtctgt cctgagggcc tccctggctg gcacaccctc ccgagcacag 8340 gcccacctct ttccattgct ctgttactgt ccatatttgt tcatgtgaac aaccaacctt 8400 cagcgagcct gggctgtgtt gaattcactt tcatatctcc aaaagcagga agccgtcaaa 8460 ggtactaaag agggaagtgt taccaggttt atgcttcagg aaaataacag ctatgttcta 8520 gagagcggat taggagaaca tagccaaggg agtaggaaga tacattgtgt gtcagtgtcc 8580 ttaggagaag catgagcaca aattacacaa gggcagtaga gggcccggag gtggcaggga 8640 ccaggcctgc ctccaccaag gcactggctg cccactttgt cagtctttgg agtctgtgtc 8700 ctccatgatt tggctccctt ctcaggctgg tggcaagctg gttgcagcag ttctggcccg 8760 catgaccaga agcactcaac aagcatcccc tcgtacctca ttggcctcgg ttgggtcaca 8820 catccattcc tgaaccagtt tctagggcca ggaaatgcca tgccctgatt ggcttaggtt 8880 tettacetea gagetgteae gtecageeet ggagetagag gttgggtetg etteeeeeg 8940 gaccccctag aatggggagc aggacagggg aatgaatagc tgagtgaaag taggccatcc 9000 ttagcaagga ggaaatgcct gctagctatg catccgtgtt tgctacagga accagatgga 9060 cccattcatt catcttttga accttgtaca tggtaagcac ctacacacca gtagggacat 9120 actttgtgga aacagcatac catcatcctg ggtgaatttc agtcctcatg aaggatcccc 9180 taccettate ectacecaga ceettggete tecatteett gaettetttt tggatettgt 9240 ttttgaccag ccatctccaa ggtcagacac acagcctgct ctctgaccat ggcctcagcc 9300 cetteaacte cettatecag tgacteceae acteetete ttgacetete agacactaca 9360 cccagtgatt agcaacatgg accatacttc agctgtgcca cttacttggt aatttgggcc 9420 aaatacttaa taaactctcc tgtaacatag aggtaggaac cggctttgca gggctcttgc 9480 gaggattaaa taagatcagc gtgagagatg cttaggacag aggacgtgct taataaatat 9540 tagetecatt ceagacatet gteacceage egetteette tgttttette ceateageet 9600 ctttcccatt tatttccttc ctgttccccc gtaggtctcc tggtccatat gctgccgtat 9660 tgtateteca etecettace ecettattet teceteatae ettectggea gatatteage 9720 ttggaccaac ctaactttct tcacactaat gtctaagttg ctagaaaaaa attaacagtg 9780 ggacagatgc ttgctacagt aacttcagat cctgtggcct ccgaatactc cctggcaata 9840 ctccctggca atccttatgc tctgcccagg tcaactgttt ttcctattct ccaaaggagc 9900 aatttcaaac cttcatcact ttcctcaaac tccttccccc atcacactcc ccattctttg 9960 cagataattt gtgtcctaat tttcaggaaa gaacctaaaa aatcatacta ggacattcta 10020 aatcccccct gcccaatcca cagatcttac tgttatcgct gcccatcttc cttcctcttg 10080 cagecaagaa aggggttcca ettttgtgtt ggatecaate eettgteate teagagaeet 10140 tgaatctgca gttctctctg tctctcttaa tgtcttctac tccaccatcc atagtgcctt 10200 cttcctgtca gcattgaaac aagtctctgt catctttaaa tatactccct tcaaacacct 10260 traagtaract ctraacatrot ctratrottt corattrocat ttraatgaate ttgcctcttc 10320 cctagcactg tctaatttgc taaaagagtt gtattcactc atgattgcca tttcctggct 10380 ttctattcgt ttttcaacct gtcaccccga tctctgcccc cagcactccc tgcaagagtc 10440 ttttctgata gatccaaagg attccttgtt tgggaatgtt ctctgttact tgacctctta 10500 gaaggattta acgctgctga ctatgccctc cttgaggcat gttctctctt tggcttctat 10560 aatgtcagaa ctcagaactc catagccact ccccagtttc tgttgtccag ctcttaaata 10620 caggtgtttc tcaggattct atccagggct ctcttatccc ttcaggttac aatcttgctt 10680 ataaacttca gaactgtatg ttcagcagcc tactggccat ctccactaga tgcctcccag 10740 gtatgttaga atccgcaatc tcagattgaa ctcaaactct tctcccaaac ctgtttttct 10800 teettgteag ggtgagtage aatageatet geeetgeage etgageeaga gaateetgaa 10860 cacttgttga ctcttccctc tctcactgac tttatctcca gaccatcacc aagtcctgta 10920 atgctggtga ggtgaaagga gcatggattt tggttaaaat tccagttcta attgtggttt 10980 gctcaaacta cttaatcttt ctcagcctca agttcctcat ctgtttaaag gaaatagcaa 11040 tacctaattt aagtggtttt tgtcaggata aaggaaagcc tttacttggt aggtgatatg 11100 gtttggctct gtgtccccac tcaaatctca ccttgaattt tagtaatccc tcatgttgtg 11160 ggagggaccc agtgggaagt aattgaatta tgggggtggg ctttccctgt gctgttctcg 11220 tggtagtgaa taagcctcac aggatctgat ggttttgtaa atgggagttt ccctgcacaa 11280 gccctcttgc ctctcgccac gtaagacttg cctttgcttc tcctttgcct tccaccatga 11340 ttgtgaggcc tccccagcca tgtggaactg tgagtccatt aaacctcttt cctttataaa 11400 ttacccagtc tcaggtatgt atttattagc agtgtgagaa cagactaata cagtaggcat 11460 tcaataaatg tgagtcctcc atttagtaaa catgactgct cttctgttcc agtcctctct 11520 ctcccctacc ctatcaccac ctctgctgac ttgccttatt gttgagttgg tgtgaacata 11580 gtttcctgac tttgagactc cccctgcaat tagatttccc atagttcctt catgactaag 11640 gactaagtgc tggtcaccac agcattgtgt ggggtctggg aggcagatgc cagatgttac 11700 tggcacataa ttagatgtgt atgtacttcc aagtcttgtc tcttagctgt ctccaacgcc 11760 actgcacctc cgtaagccaa atcctcatca tctcattggg ctactgcagc agccccctct 11820 aaggcatttc tctatgccct ctctcacttc agcccttctc tacctgacca tcagagctgg 11880 tetttetgee etgaaacetg ceatggette tetettetgg tgaagtgaag tteacacact 11940 cctacqtqca qcctqccttq ccagctcatc tcccttgcat gcctgtgcca gcccagtggc 12000 taagtcctct ctgacccagt gacacctttc atgataaggg agcaagaagg atgcttagat 12060 actgattgag aagctgaata ctatacttct tgggtctagt ggctagtagg acaggcataa 12120 qacactcaqc taagaccagc tgtccagaaa actgggacca aaagacacag gaaacccagg 12180 agggettaga attetgtaag aateaceagt eataaaataa ggaggaaaae etattagtet 12240 tctgtcaaag cagtgtatgc ttatgaagaa tttggaaaat gcaaagaaag taatcacctg 12300 gaacctctca gctagtgata ggcactgttg ctgtttaggt atgttccttc caagtctttt 12360 tttttttttt tttttgagac agactctegc tatgtcgccc aggctggaat gcagtggcaa 12420 aatctgggct cactgcaacc tccacccgcc aggttcaaac gattctcgtg tctcagcctc 12480 ctgagtagct gggactacag gtgcgtgcca ccacacccag ctaatttttt gtattttact 12540 agagatgggg ttttaccatg ttgcccaggc tggtctcctg agctcaggca atccacccgc 12600 ctcggcctcc caaagtgcta ggattatagg catgagccac cacatctggc ctcagtcttt 12660 cttctaggaa gtctttgtcc ttttttacat agtcttcatg gtacactgta taatcaagtg 12720 tgcatcctgc tttatctcat ctgtccaacc tatttttcct gggttagtaa aaattctccc 12780 taagccatgt aacaactacc tgctattcca tgtgtgacta tagcatagtt tgtttaacct 12840 tttgccactg ctggactttt tagtctttcc aataaataac actgggggga acagttttgc 12900 aaataaaact tttcttccta catttctgat gatttttcta agctataaat tcataactta 12960 aatcactgag tcaaatcata tgaaaatttc taagcaatgc agactcaaaa tggacagaat 13020 gaatatagac ctgacctcag ctgcaaagag agaggtaaag agaaaagggt tgtaactaat 13080 agatgctttt aaaattatgt tttacttcac aaaggagagg gctgggaaga ttcaagtggt 13140 gctctgtagg gcaaacatgc ctttgacttg aagttctggc ttcatgatgg tcgagaaggg 13200 cttgtttctg cttttgtgtt ttcatctggg tcagttagag gacaaaccat tcctgtgagt 13260 tcctttccca ctaaggaaga gaaaaatcgt ccagtatcta atgatgcaga tcattagctg 13320 tgttcgcagc cttgtagtta aaaaaaaaat tataataatg tatcctccta atgtgcagtt 13380 aattttagtt aaaatctccc tagtgcttta aaaacccagt gaatttataa acatagtagt 13440 tggcttgcat ttggaatgtt aaagctgtca taaccaactg gctctagcag ggcatgctgc 13500 acctecttga getetgttgg aagtteagea eteacetgag eactgeeete tggaateeag 13560 aaagaaacca agactttccc agagttcctg ttcctgatct tccataactg aagaaagcta 13620 atgagtgtct caaagttaac atgtccaaag tcaaaccttt gactccctat cagtccccaa 13680 attcagtctt tctctcagca gtggatcagc cacctgactg gtgattcaga ttcaaaatct 13740 tgaaccgtcc ttgagttctt cctttctttc cttaccactg ccaacatcaa atccaccagc 13800 atatcttgtt gattcgactt ctaaaatgta cctcaaattg tccatttctc tcactctatc 13860 ccagcccccc tggccgctcc cctgactgta gtggctgcct cctgcaggat gttgcttctg 13920 ctctgtggtc tgtggtctgc agtctgcact gtagccagag gggtcttgcc aaaatagaat 13980 tctgattacc tcatctactc cttcttttc ttttcttcgc tgttaaggta aaggccaaaa 14040 attccagtgt ggccaagaag gtcctcccca gagtcaccca ccatgtccct ggatctatca 14100 gegeecaact teaceageea teetgeaget cetgeeceag ggettetgea eteactgtge 14160 tototoctca ggagaaccot otocactoco catocotoct cotoctgatt cagaggagco 14220 ttcccttcta cccattctat ccaggtcagg ctcttcactt tcatggaaac atggggattt 14280 ttttcttqct tcaqaqaqcc tattttaatt tgaagttcta cacatatatg cacattcatt 14340 ggtgtgatca tttgattgct gtcagtcttc tctgctagac ggtaagaccc atgaaaagag 14400 tetgetgtea etgttettte eeteteaget ageteatgte tageacaaga taggtgetta 14460 ataaacgtat tggttgcatg ctgaatgaac aagtagagtc ttgctgacag tcatcattga 14520 tgatggggtc cttgtaaggt gtgggctctt cccagagtgg gcaggcccag gttctccaca 14580 acacattgac ttgagggagt gtgacttcgt ttgattttat ttttttcatt tcagctattg 14640 gaatgaatag agcatgctgc ctaaaacttc tttttctctt ctctctctct tcagctaaag 14700 cttgctttca ctctggacca cgagaccgga ttgcctcaag gatgtcatat ctatgagtac 14760 cgcgagagca acaagtaagc cactcagtgg gaaagagtgt cacttcacat gtgtgcagca 14820 gtggtgcctg tgggctttct gacactgagc ttccattgct aagtggttgt caggaaggga 14880 atacaccttt tactactata ctagaaaata gctggcacag aaatagtcct cttgtaagat 14940

ctctttgccc ctaagtatag aacttggagc acttgcagag gagcagttgt ggtgtttag 15000 aagtagatgc tgaagcagac cttctttcaa ggctgcagat gtcccccaga ccctccccac 15060 tettggtete eagteatgtg cetgettgtt tggtteactg tgtgaetttg getttgttgt 15120 agttctcagt cactatctgc ctatacttag gtttatgggt tttgttgtga ttatctacct 15180 tgtaaatttt atattaatgg ttgggagatt tccgggtact tacagagatt taaattggtg 15240 cccttgttgg aaaggtggca ccttgcatac tttcatagca cctcctttcc acatcataga 15300 ctgctccttt ttttttttt tttttttgag acagggtctt gctctgtcac ctgggctaga 15360 gtgcagtgat agaatcgtgg ctcactgcag cccaaaactc ccgggctcaa gtgatcctcc 15420 cacctgtttc ccgagtacct ggtactacag gtgcacacca ccatgcccag ctaattttct 15480 aaatttttag tacagacagg gtctccctat gttgccctgg ttggtcttga actcctgagc 15540 tcaagcgatt ctcccacctc agcctcccaa agtgctggga ttacaggtat gagccaccac 15600 acceageeac agactgeete ettgaetgtg tattttegtt tgtgagacag tgaaagtggt 15660 ggtgaatgag gcacaggaac tgtgccccga tgatgacaat gatggtaatg acagcggcta 15720 ccattgagca cctcctatgt gttaggcaca gtactgggga ctttacattt gttatctcat 15780 ttaatcttca taacaacccc ggtgtgttat tttattattg tcatatttgc agaagctaag 15840 gtctagggaa ctaaagtaat tcactcaggg tgactcacca cggctgtgag aagcagagtc 15900 aacattatca tgtttactct ggggagagaa tagaaggaaa acaagtgacc cgtattttta 15960 cttagaaacc ccagtcaatg acaagagcag tcccatcctg gacttaagga gaatgtactc 16020 tggtctcatt gtctaaatat ccaggctgtt taattttatt cagtggaagg aaacaaatag 16080 gcacatgcca gtagaactgt ctactgtcta tgaccttcca gaagagaaac ctgggccttc 16140 ctcaagacct ctggtgctgt ttagggtaga agagaggcta ccgggtgccc tcgttaccac 16200 atctccactg ggattacctt caagacatga tgactgtttg taatttatct ttaggagaat 16260 gccatagtaa ctggtgtgta cccctaatta atcataggaa ggattgacca gacatccttt 16320 aacaattett getggaetet etgetetttg ggaaaaggtt gaagagtatt tatteaatgg 16380 gagaaggaca ccagctctct gtcctttaag tttatgtctt agctgttcac atatctggtg 16440 gcaacaactt atgttgtctt tgactgtgag aagagaaaat agcctagctc ttttttttt 16500 tttttttttt tttaatagaa acagtgtctc atgatgttcc ctaggctggt cttgaactcc 16560 tgageteaag ceateetett geeteageet teeaaagtge tgagattaca ggtgtgagte 16620 atcatgccca gcctagctct gtgtcttggt tgatccatag ctcctagcat attatcagac 16680 caagcaatgt aagaagataa cttagggttt ataaatatga ataagttttg gcccccaaag 16740 acctctaaaa gaaaatactt gtgtaggaaa tcagatagga gccatgatct agaaaagtat 16800 ggtgatcagc atgttctcac tcataggtgg gaactgaaca atgagaacac ttggacacag 16860 gaaggggaac atcatacacc ggggcctgta gtggagtggg gggagtgggg agggatagca 16920 ttaggagata tacctaaagt aaatgatgag ttaatgggtg cagcacatca acatggcaca 16980 tgtatacata tgtaacaaac ctgcatgttg tgcacatgta ccctagaact taaagtataa 17040 taattaaaaa aaaaaggaaa agaaaaaagt atggtgatca aatgctttgg tgactgcttt 17100 ctctggttct ctcttgcttg tattagagtc agtcttaggg ttcattctca atctttagac 17160 aactttccta acctctctga gcctctagtt tcatttattt tcttcttctt ctttttttt 17220 tttttctatt ttttgagata gtcttgcttt tgtcacccag cctggagtgc aattgcatga 17280 teteagetea etgeaceete egeeteetgg gtteaagtga tteteetgee teageeteee 17340 gaatagetgg gattacaggt geetgeeace acacetaget aaattttgta tttttagtag 17400 agatggggtt tcaccatatt ggcgaggctg gtcttgaatt cctgatctag gtgatccacc 17460 tgccttggcc ccccaaagtg ctgggattat agtcgtgagc caccacgccc ggcctgagcc 17520 tctagtttct tcatctatag gatgaagtag gattaatagt aggattaatt attaattgtt 17580 aattaattat taatagtagg attaataata cctctctggc agggttgcat ggggctctct 17640 ggccgggata tcatgttgaa gtgtgtcatc accagtctca catatagaat gcccatagga 17700 agtgettgtt geetettett eecaaagaga aaaactgget catgaettee atetteecag 17760 aaagtettet gecaacagtg tacteatgag ggaagagget ggtgtgeetg eegtteacag 17820 cctttggttg tgtacgacgc tctgtcaaag gcagactcct cactcatgag ttatgaagca 17880 cggaggaccc caaaatcctg actatgattt attgtctccc ccagaccctt ccctgtttgt 17940 gttcctctgt ttccatttag ggtcattttc cctacaatgc ctgaatccaa atattggcat 18000 aatagtgtta tttaggaaat gaagatactc agcccagacc cttaaggggc ccatgttgtc 18060 tcaggctaag taacatgaag acaataccag cagagagag aaattctaca gatgaaaaag 18120 ctagcttgag tattagtttg gtacaactga ttattgaaac tactgccttt cctttttgga 18180 tattccctgc agtacaattt gtaatcactt tagcattcat ctctgtttgc caaattcaat 18240 ccatcagcag aaaaagttgt tctgaataag tgctgaggct gttggatggt tctcccaaat 18300 agtettteet tteaaatgga atggeeegga aaatgggeae teeattttta tattttetgg 18360 attettttat cageceteca ttaaegggat teagtateaa aageaggtaa agttttetge 18420 aacagagaag aagaatgtgg ccctcgggtc catgggtggt gcctgataat tttgatcctt 18480 ggctctctgt catcctgttc tcctttcaca taaaggggct aatctctacc tctggggtcc 18540 agggaggaca gtccctagga cttgtccatt tctcatggga cttggaccct gccttctcta 18600 aggctagagg cacagctgtc gggtaaacat tcttaaagct ctgaggtcat tagaagaaag 18660 agagaagctg tectatggtg cettgggtte aactagtaaa getetecace etgaattatt 18720

ctgtcagcct cccaaaagct gctccagtct gcatctggag gtgtgaggcc tcacaccccc 18780 tggcagatgc caccgtgggt ctacgggtgg tgactggttt ttttttttc tctgttgcag 18840 aaaactttac ctgtctttaa cactaaatcc agttaatcaa ggagtgatcg agagtcattt 18900 ttgtcaaatt gaagtttgga gatctctgga tatagggcaa ggaacaagac cttcaggagt 18960 gaataagtga tttgtgagaa ttcagttaca catttatgaa gcccctgctc tgtacagtgt 19020 gttacatggg ggaggcaaag atacgttaga cccagtgcat gccctcaggg tttgtataag 19080 gagcaaagcg cactccagca ccctgtggga tgatatgcac tttggcagtg gtaggaatcg 19140 agtgctatgg cagcaacgat gaggaaagtg aatgcttccg actttggagt tactgtgtgg 19200 atggtggtga cetteacaga caaggagett tgteagaagg eteetttete teeateecea 19260 eggetaccet cetteteact geeaggactg tggagetget ttgeaageta ttetteetge 19320 cgttagctgg ttggcctccc ggctgtcctc tctgcagcct gagtgagtgt gtgtgtcttt 19380 tccttctggt tgctttttag accttatttt tgtctttggc attctgcagt tttactacat 19440 tatgtctgag tggattcatt tttatttata ttgtttagga ctcaatatag ttctcattta 19500 gaaattttta totattatot tigattotot tiggitotot otaatototo ottoiggaac 19560 ttgttagaaa ccatcttatt tcatctttcc tctctttttt ctatttctgt atctgttaat 19620 gctgcattgt aggcaacttc ctcaaaagtg tctgtcactt tattctcctt gtagcagttt 19680 actategget gettaataac eetteecaat atgaatattt ggtttttatt ttattttatt 19740 tattttttga gatggagtct cgctctgtca cccaggctgg agtgcagtgg cgcaaactca 19800 gctcactgca acctgcacca cctgggttca agtgattctc ttgcctcagc ctcctgagta 19860 gctgggatta caggcgcgca ccaccacgca gggctaattt ttttgtattt ttagtagaga 19920 tgggatttcg ccatgttggc caggctggtc tcaaactcct aacctcaggt gatctgccca 19980 actcagectc ccaaagtgct ggggttacag gegtgageca ccaegectgt ceteatgttt 20040 ggtttttata tttaattttc agaagttctg tttggtgctt ttgaaaatcc gcctattact 20100 attaattaat ttttttggtg tcctagtctt ctgttatgat ttctattctt tcttttatct 20160 ccctaattat tttggttgta tttattttac agcctctttc cagttatttg aagagtttta 20220 gttctagttc caagagtacc aattctctta tttcttgtgt ctattgactc actcttacgt 20280 ggttcatttt ctcttgcaac ttgttttttt atcataagat catcttaggc tgtgcgcagt 20340. ggeteaegee tgtaateeea geaetttggg aggeegagge agaaggatea eetgaagtea 20400 ggagttcgag accagcctgg ccaacatggt gaaaccctgt atctactaaa aatacacaaa 20460 ttagttgggc gtgatggcac acacctgtaa gaccagctac ccgggaggct gaggcaggag 20520 agtcacttga gcccaggagg cagaggatgc aatgagctga gatcgtgcca ttgcactcca 20580 gcctgggtga cagaacaaga ccccatctca gaaaaaaaaa aaaaagatca tcttaagtag 20640 ggattgtgtt tagtgggagt tccacatact gtgggttgtg gatgtgttat cttatcactt 20700 ttgcatatgt tctgccaaga cccagggagg ttcataggtc ctgctagttt ggatgttaac 20760 teettggett aggagtetea eeteetgggt aggeeacatt etgaeteete acceatgtge 20820 cgtgtgggct tcacatctcc atttctcata ggagatgcct ctggtctgtg ccacatacgg 20880 ccattcctct gctctgtgag aaaggtcttc ctgattcttt gttcaaagac caacagctcc 20940 caggatectg getttatgtg gggateteag ttecagttee atgaceaggt etteagttee 21000 atggccaggt cttctgcctc ctgcatgcat taaaatctta gctcctgtaa ctgtatcaac 21060 gtctgatact cccggccccc agttgccacg gtaaaaatta cagctctgac ttaatttttt 21120 tttcacttca agcatctgag aattttctca ttattcttct atactcaata atatatttaa 21180 attattattt tggtatattt tatctattag ttctctgtgt ttgtgttggg aaggaggtcc 21240 acatcagttc agtctactat cttgtcagaa tcggagatct gaataaactt aaatatggtc 21300 actcatttag caaatgtata gagaatatct gctatatacc tgtatagttc taggccctgg 21360 ggccacagag ctgaataaac gctgatgctg ccaacagagg cccatgtgcc agtggaaggg 21420 actgggcact ceteageage aaggeageea geeetgtgat eecaceeeae etgeetgeea 21480 tacagaccca tectgtette etgecetgge accetacatg etgtetgtae cagattacet 21540 cacgeteetg egtacaaegt gteeetgttg teatgeeatt ttetgettet agaacateee 21600 tettteecag aacceegtge ceacceatet aggtaacete tgetteteet tecactetea 21660 gctaggtatt teteetetgg gaagceatte cacacecete acaggeacea ccaaagetgg 21720 gtcagatgtg cetteceegt ggeeetgtge egtgeetgte tgeteeatgt cagetettag 21780 cactgtgcct ttcagttgtg ggtttgcttg ttggcttccg ccactggcct gatgcttttg 21840 aggtcaaggt cttgtttttt tcatttcagt acccacagtg cctaatccac tatctggcaa 21900 ataatgcttg atgaagggaa ggtgggggac ctgatttagt cctttaggaa gggagggagc 21960 atggctactg aggagtcaag cttctttcca gctttgtctt ttcatttgcc gtaggattat 22020 catgatgatt aaattacaca tgacatcagg gaaactgtct tcatggatag ctgtgaattc 22080 tgaagagcta acatggagaa aagaagctgt aaaaatgtgg cttaactcta aatatagtgg 22140 taattacagt cacttacatc agtttttttt tgccattttt tgccgggtag tgaagaacag 22200 tgatagctat gaagagcatt aaacatgtca gacaaacttg tggaagctga attcgattgc 22260 aaggetatae tettgtteae gacatetaga etttatgate eatgtaeeat aateatgatg 22320 ggagctacca tettetgagt geeegeagae aceaggeaag gggettacee aggttagtte 22380 tagtctaaaa ccattcaaga aggatattca caataaaaaa taaaaataaa accagtgaga 22440 gtctgagagg ttttattatt ttcacaattg tacagaataa aaaataaaaa caaaccaaaa 22500

ctgaagagtc tgaagaggct cacctgccaa ggccacagag gtcaagggca gaacctggcc 22560 agttgtggca aattctaaag cctgtgctgt gccttcatga cacctgcctt tctctccatg 22620 ccaggaagct gcagggagtg ctgattccag ccgtttctaa gcaggcctgc ttgggaaggc 22680 tgtctgggaa atcctgggat ttccagtccc tgtgaacccc aggtcagatg ggcagcttct 22740 gacttgtcat cagagttctg ggttaggcca gtcacgctgc ttggcaggtc accatccatt 22800 cagtggtatg tgatgtggct gtgttagtta taaagacctc gtagttttgg gggtgcagtt 22860 gccctgaata cctgcctgat tggcccttgt agtagaccct ggcagaccca ggccctagct 22920 ttggggtgcc tgctcctctg ccctgctggc agttgtgcct cacttggtcc agacagtgag 22980 gccaqcaqtt gctggcagat ccgttgtccc tgcggacctc tcagagcctc cttgacactc 23040 acagccaggt cctctgcctt actgcagttc ttactcttag aacaggttag tttgctaaac 23100 ttaacaagag aaaatcttcc attttttcct gcctagctac tggactcatt ttgggacctt 23160 gaaacacaca tcattaaact tactagctgg cctctagatg tgtgagagag agctacgctg 23220 tgggattgat ttccttcggc tgaagtgtct gccgcattca tgagcctgcc ttgaaggaca 23280 gtactccttg cagccttcca gaggataggg cagttctggg ctgtacatcc tctccccagc 23340 ccacaggcac ctgctagctc aggtcactgt aaggacacct gggttctctt ccccagcacc 23400 tgagcacata gttctttctg cttcccaaca tgccccctgc ccgtgggggc ttagcctgct 23460 tggcatcccc cggggtctca gaacacactc tctagacaca atagacctag agaaccaacc 23520 ctaaaaccac actgcggttc tctgttgttt tgtgtttatc atggaggatg tgatgggttc 23580 gttcaggtgc tctgacaagt ggaccccaag caggattaat gtacgagagg tgttggggga 23640 aggeetgtga aggatgaggg gagggaacag gggcaggeec ggggetteet teacettaca 23700 gcaaccagcc cttgtagaca gtatgcatcc cagggctttc ccgtgctggc attatcacag 23760 tgactcagga gcttcttccc aggtcactgc tggtgagtct ttgagcagct gagccacaac 23820 tttgtaccag ggcctgtccc tgcccacaca ccactcagaa gagcatcccc tttgcccact 23880 aggtagtgag tgagccactc cccagactct atctttctgc ctgtttcctc agaaccactc 23940 ctgtcccact tgcgtcagtt cagatctgca gagaagcaga tgctgagatg ggattggatg 24000 ttgagaaaca tatggaggaa gatgcctgtg aaggatgaaa ggggagagag tagcggaagg 24060 cagagagagc cttcagacct caacacaagt ctggccctta tgaaggaatt tggaaaggaa 24120 ggagggctgg gtagggagag teteaggeta eggeecaggt tittitgtit agtititgtit 24180 ttttgagata ggatctcatg ttgcccaagc tggtctcaat ctcctgggct taggtagatc 24240 ctcccacctc agcaccccca ccagctagga ttacaggccc gcacaatggc tcccacctgc 24300 ggcccagttt taaggttcac tgacggaaag tcctcaagcc aaagccaaag ccaaagccaa 24360 agctgactgc tggaggatcc tcacatcttg caggacctgg cctgcattag gaccctggag 24420 gcgtgctcac aggaagtgtg acttcagggc agatgcagtg gtggatcaga gcacttgcag 24480 ttggggacat tgtcagtagt agaagatctg agtgatgcct cttcctggct gctgcacttg 24540 aggaggggac agagcagggt gttcctggat gaagtcctgt ttaattagct tccccctgc 24600 ttggttcttt gcctttgcct tcatcctgaa taagcagagg aaatatttcc cagcagctct 24660 gacaacttca aaccagcacc aacacttccc agtactttgg aaatgacact ttctgtctgc 24720 accttggaac tgatgccagc tcctcaggct aagcagcagt gttacctaag agccattcat 24780 tgcagagggc gagagcctcc aggcctccca gacactgcca ggttagcttg aagaaggcct 24840 ttcttgttcc tgatgaagcc ttagtttagg agaaaggggg gcttgaaatc aagagagagg 24900 aggggcttgg gggaagttgg aagcgatgca gccagagagg tgccaggcgt gagctcatgg 24960 gtgcaagcct gcagctgtat tgtgcacgtg ggagtcagcc actcacagtg caggtgtgag 25020 ctcactgttc caccacagcc gttagtgttt ggcatcagca tgatgcaggc acaactcctg 25080 cttccactgc tggattcggg tagtgttcag cgaagggagt gtctctccac cgtccaccca 25140 agcaatcagg atattttgtc tgccaacaag cagtgcttca tttaacctca gttttatcta 25260 caggaagagg agaagagggt atgaacactc ccattttaga gagagagaaa cagatgccct 25320 gataggtgcc ctgtgcaagg tcaagctgta cataagagga ccatccagca ggcttctccc 25380 tggatactac cccagctatc tgatgcaagc aggtgtgggg ccctagaaca actacacaga 25440 agtggcactg agttgcccat gggtccagga gcagggaggg cagcaaggcc tggggcagca 25500 cagetgeete etgtattget tecateteet etggagteae agteaceeag teteeteeae 25560 atggaatctg aactgcaaag ggccaggaca aggaggagct ctttttcagc tgtgttgagt 25620 cagtgcctat tececaettg etgggagaac cagggaggga cagagtetga agteatattt 25680 tatagcactc agttgcctcg gcagaggttt cccatgctgc tgagctatgg tgctcaggac 25740 cetttgtaga aatcactaga cettcagete tttctggett tetgaggeca gaactgacec 25800 aaacaaggaa atgggggagc cgcaaaaatc ggcagattgt gctggccaca gaccagtcac 25860 atacatcagt gtacacacac aggaacactg gtccatgtct cagcatatag tgtgacttat 25920 gcattctgct attttttct gtagtgcaca tactggaaaa taggttttta caataagctt 25980 gctttgtaaa acttacttct gaattatgac atgcatagag aaaagtgtac aaattataag 26040 catctagttc aaggaaattg ttagaaaatg aacacatcca tgtcaagaaa tagaacatgg 26100 ccaggtgcag tggctcacac ctataatccc agcactttgg gaggccaagg caggaggatt 26160 gcttggggcc caggggtatg acaccagccc gggcagtgta acgacaatta acaaattttt 26220 atttaaaaat aaataataaa tagaacatta cagcttccag gagcctccca tgtgcccctc 26280

actectecca aaaggatace accattgtta tettetaaca etgtagattg gttgtgcetg 26340 getttgaact teatataaat ggaattattt actatattet ettttgtgee eagettttet 26400 ctttcagcat tatatttgtg agaattcatc tttgctgttg catctatagt ccattcatca 26460 atttatccaa tctgcatttg ttcagtcaac atttgtattg tttccatttt ggggttatta 26520 taaatctgct tgtacatgtc ttttggtgca catatgcatg tgttgctttt gagtatataa 26580 taggaatgaa attgctgaaa tcatatgtaa tttcacaagc agtgtgtgag agctcatctg 26640 tttattgqcc attcagtaga gtgccttttc aaatttcttg cctgtttttc tactgggttt 26700 totqtttttc ttottgattt atagtcotot atattotgga tatcagttot ttgttgctta 26760 tacatqttqc aaatatcttc cactqtqtaq tttqcttttt tactqcctct gqtgttattt 26820 taacgtacag aagtacttaa ttttaatgga gttcagtatg tcgatctttt ttattatggt 26880 taaatgcttt ttgtatacca tttaagaaat ctttgtctat attctaaaag aatctactta 26940 gaattgattt ttgaaaatgg tacagcaagt ttattttttc atatgggtat ctgttgaccc 27000 agcatcattt tttgaaaata ctttcccata gcttagcact gccacctttg tcaaaaatga 27060 agtacccata tgcacagatc tgtttctgct ctccattctg tgtcactggt ttatatatct 27120 attettgtac cagtaccaca ctacettcat gtttgtataa aaatettgat agecagtaga 27180 gctacacttt ccaacttgga ctttttctat aaagagcacc tatgctattc ttggcccatt 27240 ccatttccat atagatttta gaatcagatt gtcagttgcc acatacatgc acacaaactt 27300 gctaggattt atattgagat tgctttgaat ccatatgtca atttgggaaa aatcaacact 27360 tttatgataa tgagtcttca caaacatggt acctccctct atttagagct tctttaattt 27420 ttctcaatat aattttctgt tagagatctt gctcatgttt cattggattt actcctaggt 27480 atttgatttg tggtactatt ttaaatggta tttgtaaatt taattttctc tttgttgcta 27540 atacaaggaa acatggttta tttttgttga ccttgttatc aattactttc ctgaatttat 27600 ttattaggtt caaataattt gtagattttt tttcataaca atatttcagt tcagtgtaga 27660 tgctttttta tttccagtgt acctcatcat gtcatctgca aataatgaca gttttacttt 27720 ttcctttcca attctcatgc catgtattta tttttcttgc cttattgcac tgtacagtat 27780 ttctggacat aataataata ggcatttatg tcttgttcct gatctcaaac agaagagttt 27840 ttaccacaaa ctcactctta gattatgaaa atgaaaattt ttactggtgt tctctttagt 27900 atacacttta tttttcccca agatgagttt tcaatttggg aacttttttt taagttttaa 27960 gtggtgattt atgagctagg agctaggaaa atgatatctg attttttatt taaatgaaaa 28020 ggaactaatg tttatcacaa gactgctact cctcatttta accttgtgag gaggttttgc 28080 cttggccatt ttacagaagg atctcatggc tgtacatttg aacaaggatt caaacagatc 28140 tgtctgactt caaaacccat gctctcttta ctgctccctg attccttggt agaatattga 28200 acgtgaaccc acgaggtcgt aaaaatacca cttttgtcat agatgaccga gagaaaagtt 28260 gctaaactat tattgcctca caggtatatg cagcatcttt tcctttcccc agtaacctcc 28320 taccccaaat ctctttatat ccctgtgttt tagtccattt tcatgctact gataaagaca 28380 tacctgagac tgggcagttt acaaaagaaa gaggtttgtt ggacttacag ttccacctgg 28440 ctggggagtc ctcacaatca tggcagaagg caaggaggag caagtcacat cttacaagga 28500 tggcagcagg ccaagagagg gcatgtgcag agaaactccc atttttaaaa ccatcagatc 28560 ttgtgagacc cattcactat catgagaaca gcatgagaaa gacctgcccc cgtgattcag 28620 ttatctccca ccacgtccct cccacaacac ataggaatta tgggagctac aagatgagat 28680 ttgggtgggg acacagagcc aaaccatatg acactatcac ctgccccatc ccacctttcc 28740 ctgatttcca ttgccatgga aaggagccct ctgggcctgc ctgtggccct aaagggctgc 28800 agecetecte ageaceggee cageacecae tgggeecagt atagggeatt etceageetg 28860 tgctgtcatt ctgtcgcctg ttgtctggtg ctgggaggta ggattgaagg ctttcctcct 28920 gggcgggctg ctcaggttgc aaggtagatc ctatattttt aagccctgta gagtctcagc 28980 tgtcccattt tgagggttat gcatcctaca tgggttcaca gaatcccttt cgctgagact 29040 tggaggaatg aagaggacag agagggtcga gacccaaacc gagcaggccc cggaggcctc 29100 agggccctgg ggctgaaggg agctccctag cccgagaatg cccctcacta ttctcacact 29160 ccaccttttg cagcccaaat acccatggat gccccaagag atttccctat gagacagaaa 29220 attctagaac accaggaact ctcaaaacta gatatttcaa aactcttaaa gaccttaaag 29280 agtaaatgtt ttcattgtcg atttaacata gagttacatt aagcagctaa cactttccct 29340 ttcttgaata agatttcctg tctgtcacgt tgccatttgc tttcttcatg tttttgcgat 29400 ggactgcagc tecetecatt etggggagee teetggeget geageaatee ageatgaete 29460 ggagetettt gattttettt eccagttaet ttatageaca tgaagatgtg ttettaecag 29520 tgacagaggg tcggtgagaa tgaccatttt tgttttccgt atatctgtac ctgccacatc 29580 catacctttc tcagaaggtc ctggaatgac tcgtttctct ctctgcctct ctgggtattt 29640 ctccaaccac aggtttgcat ccccaggggg aagccagctc tctggtccct catgctaagc 29700 tttttaagca gatagtactg ccaggcggtc tttaaaccca aggaggcttg ccccttccca 29760 agacttcaag gagttctaga agagactgtg atattcaggc caggtccctg tttgatgaac 29820 agggacactc aattcctggc aagtggggtg agcgcctcca gccctcccca cccccatacc 29880 ggtgtgctgg cccagaccca gggcatattc aggtacttaa agtagcaaat gtctctgctg 29940 taaaaaccct cactccggta ctgaaagccc agagcccagg ctcaggccac agaggtctga 30000 gatatactct caaggaggtt agcccataaa agaaacaggt cataggactg catgttgggt 30060 ttgagcctga agaaaggtgc ccatggttgt catcttctgt ggctgcctgg caggtaacca 30120 gatgtgcttg gctctcttag cttttggctg tgctatctgt ggggtagtgt ttctgatctg 30180 tetteactge caeteceage tetetgagge tttgtggett tttettggtg gttgggeagg 30240 aageetetag ageetgaagg aattgetgtg ettgatgaca ggeacagget atcaatgget 30300 ataaatcgcc tagtggctgc ttcacgtatt gaagaagaac atgtttgctg tctgttctgc 30360 ggatgettet etgatggeeg gaacaeaget gegaaaagat ttegtagagt gaeteagage 30420 aagegeecag eteatgeeca etgaattaag caagaggaag tggeeaactt eegeagetge 30480 totgaaagoo caacacagoa aggootggot gagatgaaca acatagatca ttocactgac 30540 tttgggctac ccccaaqcca accccatgtg accccacacc taccccaaag ctaggtgaga 30600 cccagggtcc accctccaag cccgggttac cagtaggggg taggtgccaa actggagagt 30660 agactgtgat gaatgggtag cagagatggc agaggacatg gctcatcacc tggggtcggg 30720 gaccccgctc tcagcagctc ccttccctga gtgccctggc attggtgtgt ctgtgtgttc 30780 gcgagccctg gcatgccact gcggcttcac agtagcctcc tgggcagcgg ctcatcagct 30840 tccagcacag cctttgttgt tctataaatc tgttaatgtt tgtgctacct agaataagaa 30900 ggaaggagtc attctacaga gaggatttat tcttccaggc gccaaaacct tgttccttac 30960 gattatgtcc tgttctttaa tggggtcccc tgtactccac agtgtcattc gcctccacac 31020 tagatgtcca cacaatgctg tgtattttca ctgattttgc tggggccctg ccctgtcttt 31080 gtctctgcct ttacagtcag ggccagttgt cacttctccg tggctgtccg gagaacctgt 31140 agcaccetet ccagecacte caagcatgag getttgtggg gagegtggaa tetgtgagga 31200 agccgaggca agctgttagg attctgttca atgggaggaa aggctctgag tgaggtggga 31260 aggaaggact teccaggagg cacaettggg tteceggeee cacetetgeg etggetgeee 31320 acaggeeetg ettetgeeta ttteetggtt etgetteatg ttteaaagae ataagateaa 31380 atgtgattaa gttttaggta agcaagatat tgtgcttatt attgaattgt tcttctttag 31440 tttaacagcc ctccagttta atctaaatct gtttcctgtc attaagtctt tggtgtagat 31500 aaaagatcag ttagctggtc gctatctttt gtgtcataaa tcttctagga aaccattgtt 31560 gtgatttttc attgtaccgt tcctgaagag gaaggaactt ttcattcctt tgggcttttt 31620 tectggtgaa ttteccaget gttagtgtea tegagettaa eteteacate ettaaggeag 31680 cattagcctc agaaccacca gtacctcgct gtgtgccctg ggaggcaggt tattaccctt 31740 ggcttcatga cccatggaca gtccttgcaa tggaagggaa acacatttgt gggtagagtg 31800 tggagaatgt gtgtgaaagg ctttcctcgc ccaggcagta agtgctgcgg aaacaagcca 31860 ctttttatgc taataagatt tggacagggg ttgggaggta ggggagtgag tgtgtgttga 31920 tetgattece tgtgeecaag ageaaggaea gteaetteat eecageecet geacagtgtt 31980 gggaacacag aggtgttcag cagatgctgg acaaatgtct cctgggagta tgcagtattt 32040 gctctttttt cctctcatgt tctgtgttcc taacattctt ctattttggc ggggtgggga 32100 ggtagaaggt aggcagagtc tcactctgtt gcccaggctg gagtacagtg gcccgatctc 32160 tgctcactgt aacctctgct tgccgggttc aagcgattca tgtgcctcag cctcccgggt 32220 agctgggatt acaggtgccc tccaccacgc ctggctaatt tttgtatttt tagtagagat 32280 ggggtttcac tatgttggcc agcctggtct cgaattcctg gcctcaaggg atctgctcac 32340 etcageetce caaagtgetg ggattacagg tgtgageeae caeteetage etettetatt 32400 ttttaattac acctctaatt gtctctgaat tgtcactgaa ttaattgtct ccttaattca 32460 gtgcagaagg ttttcataat aacactaata tttatggaat agttaacaat aggtcagagc 32520 ttataatgtt aaataagata acaaagttta tctcatttaa tcctcactag aataaccctg 32580 cgaggtaggt agaagaagtt agagaggtta agtagtctgc ctaaggttac ccaggttgtg 32640 tgtggttgac agtgccctac ctttcccccc tgactttagc aatacaagaa tactggcaag 32700 ttgctgctgc cctctgggct ctgttataaa gtgaagctgc cgatccacaa tggagaaccc 32760 actectgeaa ggeeaggeet eeacagagge cagaggeeag aggeeagtag tggteggggt 32820 gcccaggaag ctgggctcaa acaagggtaa cttgcaagaa tcttcaggaa gcccttatat 32880 tcagaattgt gttctgtgcc acatgggccc tttcccacca tcaaacttag aaaacgaccc 32940 ctaggaaagt cctcagagtt catggaaggg cgctgagaag tctgcccaca ccctcgtggg 33000 ttggaggacc agtttcgcca agtgttctct ggcccagttg taaacatcat tcgtttgctt 33060 gtccagcaaa cattattgga cgcctattag tgccaggtac tgcactgagc acaagagaag 33120 ggcccagttc cttcccttga agcccacagc ccatcgagga agacaggtat gtaagacagc 33180 atttgcaagg gggtgacaaa ggccaggggg gaggtgaaca aaggatgcag ggagtggctc 33240 tcagtgttgt gagcaccccg catgggaagg ccagcgcggc agggtgctgg gtgctgttgc 33300 cctctgcttc teccggctgg agtgtcagtg tgggaccctg taggccccaa cccaccccag 33360 gggaggcaag tgagaaggtg acaggacaga gtcatgggac aagaaccaga gggaagaggc 33420 ctggccaagc cctggagaac tgagcagagc agagagccgc ctcaccaagc ctctgtgttc 33480 catcttgtca tgcttgttgg aatgaggagg aatccctaaa gatcatggat agaaggagaa 33540 tggctcttct tcccaccacc tccccaccgt ctctccctga aaccccagga gcattccaga 33600 tacaacacag ggcgggggtc ttcccttcat gttccttgag tgcagtggcc atggccactc 33660 ctttctcaga actcctactg ccagtcttag cactgctggc ctccataccc agcagggagg 33720 tgtggtctgc tcccacatgg ctggctgggc cattcctggg cagatggtat cgagtaagga 33780 gcacccagtg tcttgtgtgg ttggcacaca agacactgtg gtggttgaga gaagcagagg 33840

gcaacagcac ccagcaccct accacactgg ccttcccatg tggggtgcac acgacactgt 33900 gtggttggca cacagtggac acaccctgga ctgcatgcta cgtataagca tgtcctggtg 33960 aaactagcag ccagttettt gttttgttge aaatgaccat ttgacagtae ttecacaaca 34020 gccaaacatg gcacatgagg aactgggctt gagtatcaca aagatttact ggtaaatgga 34080 caggcataag caccattaat cagacagcac agttactctc catcttggtg gctgcacagc 34140 tcagcggacc acacagggcc ctcctggggt gttgggcaag gcctcctccc aggcagaggc 34200 agctggactg aggccagaga gttctgggtg ctacagcctc taccaggaac aacaattctc 34260 acccagggga ggcctgaagg ctgcctgggc ttggctgcct gggcttggcc taacctacct 34320 gtgaagaagc tcccagattg ctagtcagca tcccaggtac caggagagct ttcttaatgc 34380 atctgaaaat cctggataaa cagggctgcc ctctgcaacc caggctgccc tacaagatgg 34440 gcttggcctc cagagtggta gctcagggaa gcagagccct caggtccagt cacgctttgg 34500 catggtctgg cctcaccatc tgacttacga ttgacccagc ctgcctgaaa ggactcaggg 34560 cctaatccag gttgttctgg tcttggttct caggtagaat gagagtggcg tcggggaaag 34620 ggctgaagtc ttcacacagg ctgtgcgaga gcactcagca gtctttggtt gactttgggt 34680 aggagtggag atgaaaccca gcagtcttat ggttttcccg gccttccacc ccacccaccc 34740 cacatgaaga tgtcagggaa gcccagaatg ttctgggggg ggtgggggac acattcattg 34860 aaaccgctct gaacctaggt cataaaactg tgtgtcaata ttttaaaagt cacagaatga 34920 atgcagaget etgceaaact caacatgetg tgttecaggg ggtgataaga egagegttag 34980 ttcagtggaa aaaaaaacaa gacaaaagga gttttctttt aatcttctgt gtttcatgtt 35040 tatactgagg caggctgccc ttgcaggaga gaattcattc atcatgcaac caacagatga 35100 gtcccagtga cattgtcacc tgtcacctgt gttggattta agtgataacc atatacaggc 35160 agtaagaatg tatcgaggca aatgtagcct gtcccattag gccagcagaa gccatcttgg 35220 gtttcttctg ccaagttcat acacctctgg ttcaacagtg ataagctgaa gggaagttgc 35280 aggagecata aetgecaete etagteettt attactaggg ggetgtgett eeaeeeetga 35340 aaataagtct tgtttggcac tcaacgtttt ctgtggagca aacaagcaag tcatgtctct 35400 gaaatacctc atttgttccc ccaaacattt caccagctcc tccatgtgct gctcagctct 35460 gggatacata gatgggcacg gctaggtgtt cccctccctt ccccacccaa cagcctatgg 35520 tctgcagagg aaaactagcc tccagagaag gacagtctgg attcactgtt gagatgtggt 35580 ttagaatcag cccacaggac catggagcca gggagggaga tgtgtgaact gaacctgtac 35640 agccccacga gttgctgagt ggagaaggtg ggcttgggtg cggggagcag agggggcaga 35700 gtggaaatcc agggtggcct aagagtctgg gtgcctgtca cccatgagga ggccccaaag 35760 agtcccttgg gaacagaggc actgatctcc ttgtggccag taagtgagca gggctgaggc 35820 aaggaacagg ccagcaaaag cctgcggggg gccagggagt gtgacaacca aggaccccca 35880 gagcactagc agctaaggac ctcatgccac actcagacct gggcgaggga ctgacctgga 35940 gacctcctga gctttctctg actgtatgga gctcaccagg gaaaacatgg gggatgcctg 36000 gatgcattgc ccagctccga gctcagcaca aaaactccct cttggaacag tctagaaaga 36060 ggctcacctg aggcccagct gtcacccagg ggccatgatg tcatgtgggc caaggcatct 36120 gaggggcagg ggccttccgc atcccactgc tgccgtggcc cgtggcccac tctgccctgc 36180 cctcctgacc cggaggccca gtgcgtctct gtggggggtg ggaggagcgt cagcaaagga 36240 gaggetgeac agggegeett eggeagtgae gegaaaceaa gageaggaaa ageaaceetg 36300 ctcagccctg ggcgactcag acaggaaagg gcctgagcct gaggcaacca ggagggggca 36360 gccttatcag ggaggccgtg gcgcgggcct gagtgctgct tctgccctca tccaactgca 36420 gcgggacaga ggcaaacaag aggcccccc tttgtttcca ggggggcctg gaaacaaggc 36480 ttccaaggtg gcaacagtgt cccagcccag ccaggcggtg gctgcagggg gccatgtgtg 36540 tgcgcctgtg cctgtgacca gcctcagggc ctaggggcag ggagcaggcc aggggaaagg 36600 ctctgtccct ggggcttggc cgggcaggtg gaaagccagg ttcagatggg tgaccctggg 36660 ctctgcagct gctgtggtct ggcagagggg aggaggcgcc cttagcagtc aggggcagga 36720 tgatggtagt gacgtagctg actacggggg tgcctgaccc ctgggcagca atgtgctctc 36780 agggtgggct ctgtattgag ttcccactgt cagcacagcc tttggctgct gcctcctcct 36840 cagagggttc agagcaaatg atgcagggtc acctgaggac aaagcatgga tggggtgtca 36900 gggaccetgg gtetgggage ttgggcaage cettegaget caetgagete cetgtgetee 36960 tgccaggcat gagaactctg acttctgaga ctcagatgga ccgagagtgg caaagtgcct 37020 ggcagtetee acatecagee etgecaeatt gtggcatggg acetetgtgg teaettetgt 37080 ggcctcccag agacaccatc tccctctgtc accttaggac cacagtcccc tccccatgca 37140 ctgggtgtgg gggaccagtg aggagtggat gaggaagtgc agagaccact ctacgcttgt 37200 ttccctgcag actttagtgg ctgtgtggct ggggtggtgg ccctgctgaa ggggatctga 37260 cctggcagcc gtttgggcag gagcagtttt cagatgtgag cacacgttca aacttgcagc 37320 agcaaagctg ctcaaggtcc caggaagccc aggcttctct ctcgtttttg tggctgcctt 37380 ggtaacgtgt gggtgtaaga gcgtgtgtat gtgcaggaga gagacggaga gaaagaaaga 37440 cctgtgcatt ccagaacacc cttcttcctt gaacatccga ttacccagag cctaatttta 37500 aaaccgaagt cgatgccttc ttaagtctgc gatggcccag ctggcctcct taagtctgtg 37560 atggcccagt tctgttcttg ctccaagtct acgaagccag cttcccctgc tggggcttga 37620 aagggacccc tggccaggag caagcagggc agcaagcaaa gctgttgggg gcactgtggg 37680 gactccccca ggtggccagg cttctgtgtg cccgtgccac ccctcctcag gaccttgttt 37740 ccagttccgg ttgggcaggg gctggcactg gagagaggct tatgtgtcaa caccataaag 37800 cagccagcaa gccctaatga ccacgctctg caagaccaca cagcacagac tggcacctgg 37860 ttctgcttgg gggcagggcc gctgccagcc tgcaggccgc ccctacctct gggagcagag 37920 cccgaacttg gggagcgaat gaggcttctg ggctggcttt atgctgacaa gggccttctg 37980 cactgtcagc ccggccccag ctcccagcaa gtctcctttc gctccccatt acggccactg 38040 gggctccctt tggcaaggcc tgagggccca aatgtggcca tctagcctct ggggacttcc 38100 ttcctttgga gctagaaaaa caggtgcaga atgtgtctgg ctacagcagg ggcccgccca 38160 ctcacctata gaaaggccct gccatggact gagcctccca gcctaggaaa cctggctctg 38220 gcctcccctg caggcatatg atgtttggct ccagaggcct tctcctctgg gcttttccat 38280 gcctgtgaac tgggccccat tcatttctct gtggtttcat gggaacgtcc aatgcattca 38340 ggaggttgca gtgcgcgcag gaggagaggg gtcagcgaga ggcccgagct gtgactggtg 38400 ggccacccag aggccacggc accetetget ggagaetgge ageagggtge atggccaget 38460 gtgggtgggg gtccatcagt caagcagctg cactttctcc ccatccccct ccccgaccca 38520 ggcaaggtgc tctgcctgcg gctccctttc tccaggcctc cactttccag ctcccaggca 38580 cccagcccca cccggcctgg cctggaacag agctgccacc aagatctctt ccactttccc 38640 tccccagcag cctgcaattc agtgctccgt agacccctgc ctcccagggc tctgcggttt 38700 ccaccacact acactcaatt tccagctgct aagaacacag caggttctac gtaaaggtgg 38760 ccatcacctg caccccatgg gttgcccagc catggagaag aggccatggt tgggtacaca 38820 gcttctgaga caggcccagc agctgccttc atggcctcgg cagagcccag ggctctggag 38880 cttacaggca gcgtgtgccc aagtgtggaa aatttggtct gcagaagaaa tgaggctgaa 38940 attggctggg agcaattctt atcaaagcca cgttagcagt tttcagcaag agctaattga 39000 acaagetetg tgagtggeet cattecatta geaggageet eecacagage gtgacaaggg 39060 ccctggtggc tgagggcaga agaggctgtt tctgtcccac atttgccttt ggcctttgaa 39120 aatggactaa ttttcagctt tgggcactgg teetgeeeet etgeeeegge teeegeteat 39180 ttccaaggcc actctctgag tgtcctgtgt gaggaagggg tgaggtgagt ttgtcagcac 39240 tttatcaggt gcatggatct gaaatgggac acctctggcc tccttgccag agggtggctt 39300 tgtggtgagg gtaggggagg cagaagaaac ttctagaaat gttgctttta ctgtgttttt 39360 tgcccaagtc ctagagttgg ggcacccagg ccagtcacat cataagatgt gtaataataa 39420 tgtcttattt attcgaggcc aggaacttga acattgcttc cctgttttac agggaaacaa 39480 attgagatta catgagctta agaagcaagt gagtggtagg gctggcattc catgcaagcc 39540 actgaggaga agccccttgt ctccatggca gggccaggag aggggaggga caccccccaa 39600 cccctaccac ctgccagaca ggaccttcct ggccacagat gccctggatc cctgactatc 39660 aaaacccagc cccagccttt cagctgagca gagaaatact cagatccagt tcctcgatgg 39720 tcagggaagg caggetteet etgaagagea gategettta eccetttete ateteateae 39780 ctctgagccc tgccagggtg agagcagcct ttcccagcat cgtcctttaa gatgcgacag 39840 aaacaggtcc cacctgagcc agcaggaatg cggcacccag tggctggctc tgcagtcttg 39900 atgctcgccg gcaccttcag ggtgaaggac gccctgtcgt aaacgcatga agagccctgc 39960 gtttcatata ttgatgttgt tgctttttct ttagaggaac gtttgtgcac tgtgggaacc 40020 tctgtctcta ccagtgtcac ccttgctgtg gggagtgtgt accgtgtgcg gggggctggt 40080 ggcctttctc tgctgtctgc cacagtttgt gaggggctcg ctgagcctca tacctgagcc 40140 tececetece caececetee tgeeceaggg aggeecagaa ceagggagga gaggtgetgg 40200 gagtgagtgc cgaggagctg gggtcctggc cctgcagcca ctgtcacagc acagccccac 40260 cccagacctc cagagtggtg gggccctggt ggtgcaggtt ccagacgctt ggctgatgcc 40320 aggeetggat ecaaggeece egteteegag geettagett getgttetgg aaggtgatge 40380 tggctggcag ccattcccag cccctcggaa agcagttgtc aggcagtccc tgagctccag 40440 cgccccatcc cccgcagggc ccagtgatct cacgcctgtg cccctggtgc tgggaggagt 40500 ggggtgacac tagggccagt gcccacatca gaggaggaag gtatgaggcc agggcagggg 40560 gcagggcgcc ctcccgtcca gcagccccag tgcccactct gcgcccttcg gggctcccgt 40620 ggcccagagt gtggagcggc tcaacctgac cacccaggat agcttggggg cgtttcggag 40680 gtttggctgc ctaggctgtg cacctagcac agctccccag gagagggagg gaggaggtca 40740 ggggagaggg ccctgctgac cgggtcatct ctggccctgg gttcccatag gagcgcctag 40800 gctctaagct ggagcctccc catcccagga ccttggggag aaagaggctg ggcgccacct 40860 gctggcccac cagggaattg acagggtggg ggactgtgga gcctgtgctg gccgcagatg 40920 agagecetga eteceacett ecetacecea eceaceetge acegtecage teagttetet 40980 gaccegtggt gecaggteee atttgeaatg gegaatactg aacteggtge aactetgget 41040 gctggcagct gggcttggcc tgcacctttc tgtccccaaa ctccactggg gacccacctt 41100 ccagccaccc cagggtgcca ccgccagagc caggggtcag ccccaccttc attcactcct 41160 actcatagee tacetgttea etetgeece atetgetaet tgeageatea gaaggaeatg 41220 agggcaccaa acagcccctg cagctgtcct caaacatcat ggccaaggct gcacctggga 41280 agtggacttt ctgtggtgct agctccctcc tcagtgccct tgacctttgt ctgggtccct 41340 gcttaatgtg gcctaactag ttgggccaga gctccacagg tgctgtcctg actcccagcc 41400 ccaggaggga gggagaggct gagacggcaa gggaagcaga gactcagcca caccaagggc 41460 cctggcaagg tgggcctctc ctccatagcc tcaccaggct tcacgttcaa ggtcaccaag 41520 agtgcacttg ttcactgtcg agggcagagg tgactcctgg gactgtgctg ggggtccagg 41580 gagagcaggt agcggagttg ccagggaagc agcttgcctg aggtctgtgg tcttggcagg 41640 ggcttccaca gcggcccac cctctccctg tcccctccct cctgtccttg tcctcgtgtt 41700 tactgaaaac catgagaagg gatgtggaga gcgcctgcag gaactgagag caggagcctg 41760 gctcagccct gagaggcccc cagatattca attcctaaac ccatagaggg tggggcatgg 41820 gcacagagga gtaaccaggg gccacctcac acagccctgc tctttcaccc tgcccgcctg 41880 gtggcctcct tagcctgcag cctcagtgct gcccgctatg gggtcatgct gcctcctgct 41940 ggccacactg caaaatgcag cccagggtcg ggcctaaggc tacacttgtc cctcttccgg 42000 caageetgea getgggetgg aggggaaage aggeaceaea gaattgeetg gatgeteetg 42060 cccaggagga ttgtccgact gcatggggag aaaagtccag aaccgtgcct ggcacatagt 42120 agtttttatg gagtgagagg gcaaaagtac gcatgattgt gtgcatctga agtatttccg 42180 tgctgatggc ctgaccagta tcagattatt tttcaagcag gaattttgat tcctcttggg 42240 ttcacaatat cttattatga aatccgaata agaacagtct aatggcacca gacagtgata 42300 caggtgagcc tagaacagtc agtgttcatg tgggggactg cagcctgctt ttcagggagg 42360 cttcaaaaga attgaggaac acagattgat ggcagggatg aaaatcacag ggcatattga 42420 ggagaccccc agctggccat gtgggggca ggtggggcaa caggagaaca gtgcctgcgt 42480 cctgagggct ttcaatgcat caggcagagg gcctgccagt gcagaacctg ttttctctgc 42540 gtccatgaca gccctgagca ggtgccattg tgacccctgt cctgcatttg agacagagga 42600 tggggagggc tctgtgattt gttcagaatc ccacggcaag aaagttgtgg agctgagagt 42660 caaacctggg cttgggagac ttgtagtggg ttaagggctt gaacacaggg tttttggcag 42720 gaagtggtgg gcacaagcac agattagggc tgggaggtgg ggtggcacat cacaggccgt 42780 tactgccacc cagagggcaa catggatgct cctcctttta cctgctgggt gtcctgtgtg 42840 gtagaagggc aggctgaagc ttgatccttg tggtcacaca tcccagctgt cacctgcctt 42900 actgtgtgcc atgagccagc ccaaaaaagt ccccactagt ccccagggga ggcgctaggg 42960 gtgctgggct ggcttccctc ctctccaggt ggtgcctgcc ctcctggggc atttcccagc 43020 ccttcttcct ctgcatctca ggctccctgg ggaggcagat atgctctcag gacatcctgg 43080 cagagcacag ccacacgtct gccctggcag gcccaccctg ggtggaggag gggctctata 43140 tgccagggct ctctctctcg gtggctggct ttctttccac gagcatggcc agatgacgag 43200 gctcacccgc agcactactc acacctccag gaagggaagt tgatggcagg gttctggctg 43260 cagccaggcc tgcgggagct tcctccctga tctctctcac tcaaggggaa agctcagggc 43320 tgggcatgaa ggctggggaa aggcagggaa ggcagagtcc ccccaggctg gtcaaggccc 43380 cgatagcccc atgtctccct gagggggcgg ctttccccat gaagagggtc ctggtcacca 43440 aggcatgagg acatgcccaa ggctggccca tcacaacagg ctccagctct tgtgcacatg 43500 tgtgatcttc ttgtcccacc aaaggcggga aaaagaagtg cgtggcctcc tgccccagat 43560 ttggtggtag ggtcagtggt gctgacctca gtgctgtgtg ataccagccc cccagccttt 43620 gcctggttca tgtcccacat cgcctatcgg tccccgctcc ttcagtctgg gaccttggcc 43680 tgctcagtcc ttctgtgggg agccacatcc attcacagtg actgttgagt ctaatgacag 43740 acacccaagt gctgcaaagc cagagcagca gcccctgaaa gggtgactct ggggtctcac 43800 cccatcccca ctcctgccct gtcctctggt gagggcttcc ctcctgctgc ctcagactgt 43860 cctgtctacc ctcagagacc ctgttgggag gcttccctcc aacaaggcac cgtccccaga 43920 ggagaaggga gcccagcact cctgggactg tggggtcctt ggtccactca ccactgccac 43980 atgcctcagg gagccctcag agcaggggct gagctggggc cccagggttc ccatgccctg 44040 ggcgagcatg gtgccctctt acagcctggg ctgcccgagt gttccaggca tcctgtcatt 44100 cagcagagat ctttcctcgg tgccttctct ggattgggtg ggctgctgag ctctggggct 44160 gctgcagtga attatttaat agatgggtgc ttccctgctc tccagggtcc ccctctggga 44220 gagccagcac aggagctaac cagtcagagg agaaggcggt gtagaccaac tggtgcaggg 44280 agaccatggg ggtgctgggc aagacaggga cttggcggaa cacatgagat gaggtagctg 44340 ggaggttgtc tttaagctga gacctgaagg gtgattgata gagagccagg ccggctgcag 44400 cgtgggaaag cctgcgcacc tgtccccaaa ccccagcggt ccctcccatc ccacccaccc 44460 tctgcaggct cgtggaggag ttcatgctct tggccaacat ggcagtggcc cacaagatcc 44520 accgcgcctt ccccgagcag gccctgctgc gccggcaccc cccgccccaa acaaggatgc 44580 tcagtgacct ggtggaattc tgcgaccaga tggggctgcc cgtggacttc agctccgcag 44640 gagccctcaa tgtgagtggt gggcaggatt cgggggaggc cctgcttggg ggaaagaaga 44700 gaaagacctg gaaggtgggg tggtccagcg gcctctgctt ccccccagag tccctcccct 44760 tcagccaggt ctctcctgta gggaaggagg ccctgggaga aagggcccct ctgagtcaca 44820 ggggccctga cagtgggacc tgccccttca ccaggactgt gccaagcggg gggaccctgg 44880 aggcctagca gagggcaggg gtcctgtggc cagaaagggc tggtcttggg cccagaggct 44940 ttcagagtcg gggctggaat tgtaggaatc ccgggaatgt tcctggtggg tactttcagg 45000 tgctccctgc ctggggcaaa gctaagaaac ccagggcctt ggctgtggtc ctggaggagg 45060 gagacatete acceaggece aaccetggga ggggaaggea ggtgeeceag geeagagage 45120 tggagcccag tgagtccagg ccagccagca aaaacatgga agtgtgggcc acagggtgtg 45180 ggcggctgcc ccctctcccc acccatcccc tctgagcagg gctgagcccc acaggcaact 45240 cctccccca gagccgggca tgaggtgctc agcggatgac agggcccaga gtctctgccc 45300 gagetggace acaegteaca taggtttetg ggatttgett etagaaaage etgacecaaa 45360 catttggaga tgacaagtac tcactggccc gcaaggaggt gctcaccaac atgtgctccc 45420 ggcccatgca ggtaaggagg gcccagcccc ggcctcccct gctcccagga gcacactagc 45480 cccagacctg tgacctccac gtgcaagcac aggcccccac cgttcctgcc tgctctggac 45540 atggctgggt ggacgggggc tgctcctcct ctgccagagg gtgggagagg aggccgaccc 45600 caggcagcac ctaggagggg gcaccctgag cctcttgagt ttgagccgct gtctcctgct 45660 cacacteget caaggacaga gtgeeetgga getgagggge taetgagaee teetgteagg 45720 ctggggtcct ggaggagaga cagggtccca tgtggtttcc tgtcccaggg aacactccgc 45780 agcetecate eccaeatgtg gagtecagaa etagetgtea geetetggee agtgtgggaa 45840 agaageggae ttggeegggg geetaggeet gggeetgeag ggaggtggea geetgtgggg 45900 tggacagetg ggettgetet gggatgeetg teacagegee ceaggetgag ettececeat 45960 gcagggcccg agcatcctgg gaccaggacc ccagaggacc ctcgggtcag cgggagcagt 46020 ggatgctgat gggtcggctc tgggtcccac cccggcccag gggcagagac aggctgtatt 46080 ttaggggctc ggtcactcgg cagattcaat ctgttcacaa gaactgatgg cttcagctga 46140 cctcagtgga tttattttct gacacttcaa gctctgctgg gtttgaagcc atcagggcct 46200 gettgggeet ggteacegtg acetgeece agteacaagt gtetgeecag ceaageacet 46260 gtggcaccca cagcggagag gggctgggcc gtgcccactg ggctctctct gttctacact 46320 gcagcggctc taggcctggc agagaaggca cagcagcccc tgagtcccag aactgcctct 46380 ggctctgccc tgctggggcc cctcccatgt ccctgcctct gacgccatca cctccaagga 46440 ggtacaagcc aagctggagc tccagagatc ggagccgctc cggagttagc cagagcccga 46500 aaagcctgca ttctcctggc tcgcctccca gggagctcag aggtgccctt gcccgggaat 46560 ccgatggcag agagttacca ggtctgcggt gctcctgttc ctcagccccg ggaactgggg 46620 tggggacagg gcagggcagc agcagagagc acagaaaggt gtgagggggc acacagtccc 46680 cagtgagcat ctgcatcagg acaccagggc tgtccgaggg ctgtcccagg gatggctggg 46740 cctgtgggaa agccatggtc cccacccatc ccacccgacc ctgagccacc tccaccagcc 46800 aagaggggcc agggcccttc atcaacctca cccaggtcat ctggggaact gggccaccac 46860 tgagaacaaa gcccagacat gtctgggagt ggaggctgtg cccacctccc ccagagactt 46920 gcccccgact taacccaggg cccagcaggg gctggaaggg aagtggagtt agggagcgga 46980 gcaggtcacc atcagctgcg ccctggattc cagggcccgt gtgcacagag taacgggagc 47040 cggctgtctg tctggccaag ggcacaggag ggtgagtgtg tacagcagcc agggagcaag 47100 ggagccagag agacatacag gcgtgacctt ggacctctgc gaggaacccg ttcactcgct 47160 cccaggcagt agcactggcc ctgacaccca gccctgaaag ctcggggact gcaggacaaa 47220 cagetteagg ggetgtggee eeagetggga egggetatge getggteeet agagaetete 47280 ggtatetece cetgeeceag teetgeetee tgeecageae aagggeettt ggaacteage 47340 cctctgtgtc tcagcccccg ggagggtcag gtgtcagaga cgagaagggc cgaggctggc 47400 aggccggaaa ctgcctccct tgactgctgt ggggtggagt attggcgagc acagaggtgc 47460 ccgggtgaag cgtggcttca gctgggcggg atcagtgcca gaggggatga ggacggcccc 47520 gaccaaaggt gggcctaggc tggagaggaa gctccaagag cctgaggccc gtattgcaca 47580 gggcagggga tegeateetg ggetttetet eeeteeteee aetetggeea gatgggagga 47640 tggacgttgc ctccttgaac aaagacccac aggctccttg gcttctgctt gtgtctccag 47700 cagacagegt etgeageece tggtecaaca aaacegeagg eggeeteete etetteetee 47760 teeteatigt ceteetegae caccaceace teeteetice accaceteet cetteteete 47820 ctccgctgtc gcctcctcct cctcctcctc ctcctcctcc tcctccgctg tcgccgcctc 47880 etectectee tectecteet eegetgtege etectectee tectetgeet ecacetetge 47940 categorace tectectect ectececae eccegeege tacetttett tettetteet 48000 tetteetggg egagagtage ageceeggee ceatgetggg gaagggtagg eeagagaete 48060 ttccctcctg gtggtgctca gcagtgactc agcagggact ggacttcgga ggctcagctc 48120 gtgcccccta ccctgacagc atcctggggg ttcctggctc cctggtcctc agcagggtgg 48180 gcttgtccag gccattctca gtgctgccac cttgagggca tctgggaggc ccaggcaggc 48240 cagatttgtc tcctggaaag gacatgggta cccctgggct ctgcccagcc tcctggcctc 48300 cccctggggc cccttgtgca gcaagggccc tggccccagt cctccctggc gtcactcagc 48360 aaccagcagc ccattaggtc tgtccacaca tcgctgccga cggtgaggct gtgggtggtg 48420 ccagcettee aggeetgget gggeagetet gggettgtea ggetetgace catecegtee 48480 cgcagatggc actgtacttc tgctcggggc tgctgcagga cccagcgcag ttccggcact 48540 acgcgctcaa tgtgcccctg tacacacact tcacctcgcc catccgccgc tttgccgacg 48600 teetggtgea eegeeteetg getgeegegt taggtgaggg gtgeagtegg ggteagggea 48660 gacctgggcc agetcagggc tgcccacccc cacagtgggt gctcagtggc ccaagaccat 48720 gaaactetee etaegggeeg gtgetgeaga agetgeatgg ageeeacage cageeetgga 48840 cacageeggg aggagggege tgacetegaa gggeegettt etgetgeeet gggagetggg 48900 tgcttggggt cctaatctgt cggcggggt gcagcgccat gcagcccatc ccccagccat 48960

```
agetettece agececcag geteccaete teatgeetea ecceetette ecaggetata 49020
gggagcgact agacatggcg cccgataccc tgcagaaaca ggcggaccac tgtaacgacc 49080
gccgcatggc gtccaagcgc gtgcaggagc tcagtaccag tctcttcttt gctgttctgg 49140
tcaaggtgag ccctccagcc tggtgcccct cacctccctc tggctcccga ccctcctggg 49200
cacctgctca ccaggaggcc tcgaggagcc cagggcagtg ccaggaggtg ccatggctgc 49260
agcactgtcc ctgcaggaga gtggccccct ggagtcagaa gccatggtga tgggcatcct 49320
gaagcaagcc ttcgacgtgc tggtgctgcg ctacggcgtg cagaagcgca tctactgcaa 49380
cgtgagtgcc ctgggagagc ccgggggcgg gcagggcagc ccaagccatc ccgcactgga 49440
ggggcacagg ctgtgatggg tcacactcca cccctcgctc ccccagccct agcacaaagc 49500
ccacctgatg ggccttgctg agacgcccag ctctcccacc tgggatggtg gctccaggcc 49560
cagggtcagg cctggcccc ttccccaagg acccaggaac cagagagcag gcccctccat 49620
ggccagtaca gctcggcagg gtgtgcaggc tttggggact gtgtttatag gaacgtgaag 49680
gaatgaaagg ccagcgaatg gtccgtggcc gctttggaaa ctgtgtcccc tgaagacaag 49740
gaagagaget gteeetgget eggeteetge eetgagtgae tgttgaetea eagttetete 49800
tccaagggga catgggcctg tcctaatgct gccttagggg cttggctcca gctggccctg 49860
gggtctgcag gtcaccacct gcctctgtgc ctggctttga atttcctaac atccagagtg 49920
ccctgggagt acagtgtcca gcccgttgtg tgcagtaaac gtggtgttca taaccgggag 49980
                                                                  49999
ctgggcagaa gaggaacga
```

<210> 17 <211> 49999 <212> DNA

<213> Homo sapiens

<400> 17

cagagtecce etgeggacee tgggggetet gtateetgaa gtteaageet ageteaeeet 60 gctgtgggcc cagccctgcc tgcactgaca gatggcacca gcagggggcg cagcgctccg 120 ccgccacagt tetetgtecc caceteagtg cagteagece tggaccecec accaettgce 180 ccccatagca cacagagcca cgggccttcc cagcccccac ccctggccct tggtcactct 240 cacctgctgc ctcagctgaa ggtggcctgg cagggcctcc ctgaagctcc ctccagccag 300 gcaagggtgg gccagggccg agggctgagg gccgcctcca agcattgaag ccctccaggg 360 tggaagggca ggcagcagca tccagagctg aggcctgagg cttggtgttt gcactccagg 420 cactggccct geggtcccac cacttccaga aggtgggcaa gaagccggaa ctcacgctgg 480 ccagcccct aagtcctgat gaccctctc ctgcctcctg cggtgcccct cattccttca 600 tetgtgtece etgggetece ceageactge agectecegg gtggggtttt agggecetee 660 cageteacee agaeeeete etgtgggtee tgetttetgg caccacette cetteettgg 720 gggcaaccac agtggagaga ggaggggctc tgcctgtccc gctaatgcag gggtgctggc 780 cttctagggt cctttagaga acctgatgaa agctatgagt ttacacccaa gaaattgtct 840 ggaaccgttt tcaccaacag tgtgccctga acgcggaccc aggccctcag gttgtgtttc 900 ataagcettg ggagegetea ggatgeatet gaeteeceaa etetgeeetg acceagggea 960 ttetteetgg agggggeece cattacagae aggegageag aggetteeag aggeegaagg 1020 aggggccagg ggtcctgctg cagggatgga ggcagagctg cgcctcgaca tcaggccctg 1080 ccatccttgt cccctcacgg ctgggctctg cacaggtcat caccatcttc agcctggtgg 1140 aggtggtcct gcaggcagag tccacagccc tcaagtacag cgccatcctg aagcggccag 1200 gcacccaggg ccacctgggc cctgagaagg aggaggagga gtctgacggt gagcccgagg 1260 acteaageac cagetgaget ceaceageeg cetgeeeege etgeeeegee tgeetgteee 1320 gccacactgg ctttaggacc tgttgacacg gaggggggtt tttaatttgg tttttaacaa 1380 ctcaggggtt tgtttttatt tttatttaat ttttgcagct caacttttaa acaaactgca 1440 ggggagaggg tggggctgga aggaaggctg aggcctggtc agcagtgacc ccagcagagc 1500 aggccccagt cctcctggga ggctggcccc ccttttttct gggccctact gccctcctct 1560 gcccaggaaa tggggggtt tcagcaactc agtgtcacag aataaaatca agtgtggagt 1620 gccatctggt gtgtagggcg cctctgggaa gcctgggcag cagaatgccc cttgcaccca 1680 gggcaaggga cccagttcag gcttcacccc tcgctgctga gccgatgtca acacctggaa 1740 ctttcctgtc agttccaaca cgattcagag ctggctgcct ggcagatgat tgatactgga 1800 gtctcattct gcctgattaa aaatggaatt agtatgcaac actgagagcg cccccatcac 1860 cctgacgaat gtgactgtgt ctgacgaatg tgactgtgtc caaccctgcc cccacttcct 1920 cagtteetea ageageacte tgtgaggtee tgtgeecage tetggtgtga gtgggtgeec 2040 cggcagcacc aagggagcct ggacagagga gccggcctgg gcctggggga ggggaggagg 2100 gccctccagt gccttccaaa ccaggaggg aaactggctg ctggtgacac agcctgggtg 2160 acacggatec cacetgeete agteeegage agagetgget ggecaetggg cagteeette 2220

eccagecage etgaceccag cetgtactee ttecceetee gtgggggaag etcegtgget 2280 tggcgtcccc gagagctgcc agaaactagg atgaaagcca tggtgagcac ggcctctgtt 2340 cccctgcacc atttcctggg gtgtccggat taacaagctc atttgatctg gttacagtga 2400 attttcttca aagaaacact caatagggtc ccttgtcaga gtgcctcgca gcgacagtga 2460 ctgggtactg ctgcctttgt cctgccaccg tcagacgggg ctggctatgg gaggcaacca 2520 aagacateee geacetgeee tgggageett teeeteetee agggeteage eaceteagge 2580 ggccttccgt ctgtgtgtcc tgccaccccc gagatgtccc agaggccacg gtcaccccat 2640 ctgttcctgt ccccagaacc ttctcctgga gccaagtatc tgcagggaca gacaggcgag 2700 cgtctqqqqq tttqqtqttq qqqtgqaqaa qqctqtqqqq tqctqccca gcccaggcag 2760 cctgactgtg agagccccaa acaggagagc cccaaacagg aaggaccagg gcccttcccc 2820 teceetecat getgeecace etetgaggag cagtggeeaa gtteetetet gggetteteg 2880 ggccaggetg accetgtece ceagggeete ecaegaagea tgggagetgt teeeteacag 2940 gcagcacaga cccggacgga cacctgtccc tatgtcccag cgcccccagg ccccagtgag 3000 gagtagccag gggggtgaac aagggggttc ctgctgcctg ggcttgtttg ggaagcagat 3060 gctgggctca gagtttcttc agagagcctc accttccgtg ctggccccag agcatggcgg 3120 gtccctggag ctgtggaggc catggcagcc ccagcccacc ccaccccatc tggggaagtg 3180 gaaaccgtat ccacgagggt caggtcaggt ctctgcctcc agtgacctgg caaggttgtg 3240 cccagccagg acctgggctc aggcccaggc agccgccaca ccctacccag agctcagaga 3300 aggeageeca geetteteee caeaceagte acaeegagee eegegtetge atteacteet 3360 ttaaggaaca tggttgactg aatceggtgc cgcgcattca caggatggct ctccatgggt 3420 ccactggggc ccagcctctt atgtggcccc tcgctaaaag gactcaacag aaagagtgac 3480 caggcaccga ccctcatcta aaggaggact tggccattcc ctgggctgtc ccacagcacc 3540 tgccggccag ggcccgggca cagagcgaga ctgtcttttc ctcaaggaga caccgtgggg 3600 gagggaggga gaggtagaca ccaccaacct cattccatga ccagggcctg gcgatgctca 3660 gaagccagtg agtgtgtccc tgccctgaag ggtcagtgct ggccccctgg acctaggggg 3720 aagatggtgc aggcagtggc ccagcctgag gaaggagctg aagctctcaa gagtttgcag 3780 ccaccctcct ggggagagac tgacgcctcc ccagttcctg ttaggaagga cctcaggaaa 3840 gaactggaat tacacageet ggggtggeag ceteetggte eetgaggagg atgteaggee 3900 gcagaaggga ggaacgggca tgaagcttgg gaagcgggcg ccagaggagg cgaggcctct 3960 gcagaagcag caccagaggc cactgcagcg gctccaccac ccagcagcgc cgccaggagg 4020 caggaagtgg gaggccaggc aggaggggct gtgattgccc aggtgccagg aggaagggct 4080 gagaggggac agtgcagatg tccagagagg cctgacaggg acaggctgcg aaagtcacgg 4140 gtggggatgg getteegeea gagttgtgtg tggeetgagg acagtgeage aaggaggeee 4200 catggtgage acatgcagee gaagtgacag gttgggetee tttgtgggae aagageetet 4260 ccaggccact gcagggtgtt cagagaacaa ggcctacaag gatctgctgt gcctgcagct 4320 gggcagtaga acactgagca tgcagggccg gggtgggaag caggaaagcc acatggacga 4380 gagagccggg cctgcccagc agtgcctttt gggagcgcag gcaggatggg atgtgcagct 4440 gtgacctgcc cggcatagaa ctccgtctgg ctggggagag gaggtctctt ctagccagaa 4500 tggaccagga ggtcccggga ggacctggga ggaagtggat tgagttgggc cttagaagga 4560 gagccaggaa caggccaggt caggggagct ggagcctggc taggtatgga gagagcaggg 4620 tacacttgct gcaactgtga gaagagccag gggtggccct ggtggcctgg gcgcgtttag 4680 ctgtgcctgg ggccaggcct gactggctgc aagtcattac tataggcgga gagtgcagag 4740 tagegegete etgetgteae teceteetee aagteeacaa agaggeaaga aagggaggat 4800 tttaaggeet atecataeeg eatggeaggt gagageagag gageaaaeag eacttttgga 4860 tectggaaag cagaaggtga gtgteecagg egtagetgae etgagaaagg egaeteeaaa 4920 gccagcagca gcaacagctg gaactgcccc agcctgcacc acgggacccc cagctctgag 4980 actgagagca gctctgggga cctctgggct ggggtgaaga gggatggctg gaatcattgt 5040 tgcaaacaat tcagtaggca ggcagctccc tagatcccac cgtggtctgc agaggccagc 5100 acctgtcccg acctcttact ggtcggccct ggagagccat ctcctacaga ggcaaaatga 5160 acggtctctg ggccaggacc aggcctgttc agggggatgt gtggctaagt gcataaggga 5220 tgctgagact acageceteg tgcccaggea gegeteaggg catggatage caggecetee 5280 ccatccagge cagagatggg aagactccat ccaatctcat tccatgacca gggactggca 5340 aageteteag ttetetetee ateceageag gagacaaaga acceaacete agagatteet 5400 caacteggag acceageeag gecaceetee agageatete agtetgeaag eccettggtg 5460 tgctcagage ttccagtcac actgctcatg cctatccgtg cacagccagg gattgccctt 5520 cgtggaggaa aacttcatga aacaaaaaac aagctccgtg gggaacacag accatagagg 5580 aaaaagaaag ctgtagaaaa agaaatgatg aatgccttcc tggaggtgag aaagccatcg 5640 tgaaacgaga ggaggttgct ccaaaaagtt cctagagagc aaaacaaggg cccttggagg 5700 cacaatgatt gccaccgtgg agacacattt cagcgccact agagtaaaaa cactgcagac 5760 aggtgagete teaacagata catgteeete geetteteag gaaagatggg cagtaatgag 5820 ggcagaagcc acaaagagga aaccgtagtg acaggaccca gggtccttca agctgcggtg 5880 gggcaagcgc tcgggacagt ggtgagggag cagctcagcc ccaggtggtg cctggcaacc 5940 cgccccggga cgtcccaccc agggcagcag tagagtgaca tggatagaaa gctgaattcc 6000

ccagaagagc ctggaggaca ttgaagtact tcgcatagag cctcgggttg gattagtagt 6060 acatacagaa tgatccacat gtgaagataa gaccatgatt ggctccagag aaaacagcag 6120 tgcaagcaag aagaggtagc tagtcacagt ttacgatctg gcaatagcgt ttacacagtc 6180 atcaccatag aaatgccgag tcaggatcta gtttactgca gaactctatc aggaggactg 6240 gaagatgggg acgctgtcca catgcaggga atgcagttgg tgaaatggaa gctaaatgct 6300 cattttcctc agtgggaagc tgtggcttga agatgactgt aaactctctt tccgcctctt 6360 caatcttgac aggccccagg gctgctaagc taatatggca gaagggacac tgtgccagtt 6420 gcaggcccag gccttaagag actggcagct tcccctctct gtctctggaa acctacctgc 6480 ccttctgtaa ggaagcccaa gcagctctgg agaagccctt atggaggggc ccactctcag 6540 cccacagcca gcaccagttg ggcagccacg cagaccccca acctgcaagc caggcccgct 6600 gaggcctcag tacacacagg cagtcccatc agccctgccc agatggcagt tttgtgatca 6660 aaatatagac gatagatgat tgttttttaa ggttgttggg ggtagtttgt cacacaacga 6720 tagataatag aacatcagta ggctgtgtgt gtgtgtgtgt gtgtgtagca tatatatat 6780 cacatataca tatatacaca tatacatata cacatacaca tatatacacg tatacatata 6840 tacacataca tatatacaca tacatatata cacatacaca tatatacaca 6900 tacacacata cacatataca tatatacaca tatatgcata tatacacata tatacatata 6960 tacacatagc ttcaaattca gacatgaaga agtatcttat ttagcaacag tggtaaatag 7020 taaaacacca agagagagga aagtggttgc ctcagagatg ggaaaatgca aggagggaga 7080 cggaactgct gtttgtttta acaaaccttg tagatctgtt tgatacttta aactacattc 7140 acatataact tggacaaaag taaaaactga agttgaaaaa aatgtattca tgctaatagc 7200 acaggaatga tccacaattg gattccaagg cttcttgtac attcagcata gggtgtatga 7260 aagagtccac tattctagca acagataaaa ttcctactga cacgcaacct caggttccca 7320 ctcgtttaga aggctgcgta tggtcttcta cttaaagcct caagtagcag tcatggcagt 7380 gggcccctgg gagcccaggg tgaggggcca gtccctgggc agctccgtga gccaggagca 7500 gctgtgccac ctggggaagg gctgcacggt cgatgggtct tttctgcaga agagtgtgcc 7560 ccagcccttg ctgggcacag atcaaagagg tgttcatggg tcgaaatcac agatttcaag 7620 ggctgatagg agtcagagtg ggggggctgg gagggctgag gcaggttaaa gatttgagag 7680 gggctgctgt gtccacagct gcatcacact gctctgctgt cccctccatg ttccccggca 7740 ctgccgccta ccctggggtc ttctggaagt aactgaaggc cccctcaacc tggctcatca 7800 tcaaagcaga ctgttgacta gctgcaggca aatatgaaga ggctatttcc tgtcacaaaa 7860 aggccatgct gtatctttct gaagctatgg agctgacgca ggctgagtag gctcaccttt 7920 cactggaatt gcaaaggcct agccacatga aaccgcgcct cctcatccag gagacacgga 7980 aaagggccca gcagaacgca gacaaggatg gggctgccca tcttcaggcc tctcacagcc 8040 cctctgctga agatgcagaa gcacagccct ccacagagga acgcctgcct gagactcggg 8100 gcatatgtga cagggatcca gacacacgac tgtttttcct tcagcaacag agccgtgtat 8160 tggaagcaaa gccccaaaac acgataagag tagaggagca gacaacccag ttgcagattt 8220 gaagaagcat gtggaattcc ttgtggcgga gaaggaaaga ttatggaaag aaagtaaaca 8280 ggtaaaggct gaaaaggcca gacttctaaa aggtccagta gaaaaggagc tggatgtggg 8340 tgctgatttt gtggaaaagt cagagttacg gagctcgcct ctgcattcag aaactgctat 8400 accetettea geettgeaga ggtttgeage agatgeeagg aaageeaagt acatteeaat 8460 acccaatctt ttccctcaga ttttccatct ccagagettc cetttatgga getttetgag 8520 gatattctga aaggatttat gagtaactaa aatggaaggc catagaagaa gggagaagag 8580 gaaataatac taagtcatac agttaatcca gcaacaaaaa atgaaaaggg aaagccacag 8640 gcaagggtaa teetggaaat geetegteat etggtgtaet gtaggagaag aegeattgee 8700 aggatgtggg gaacagtcgc tgtgaagcgt gtcacatacc tgattcactg acttgagctg 8760 atgatgccga cctggcagac actaaactcg tggagggtca gtttctcttg acaccaacca 8820 aatggctgcc tgaaagaatt ttttcaagca acaattattt ttcttatctt cagggttaaa 8880 atgtataaaa gtatgttatg tataattaat ctgttatgtc ataagtgatc atgcaaaacc 8940 taaatattat ggcagcctga ggggctgctt cgtatttgaa acatgctttg tctcaggcgt 9000 tgacgtatgt atgcattttg ttactggcgt tttgtataag gtgtgagaca cacctttcca 9060 gatgaaacca tatgtgccgc actgtgcact actcataacg gtgataacct caagaccatc 9120 aggagaaata tttaaatttc cgtgttatga agaaagaaac caaattatta gttatgcttt 9180 ttaacacaaa ttaccagttt acataattaa tgagggtgca ttttaagttc taactttatt 9240 gtataaggca tcatttgaaa gtaccaagga agtcttcttt gtttttagtg atccgtgagt 9300 ggaaggaatt ctagttggca gtatttgatt gtaagaaatc aataaagtaa ttgtgtttaa 9360 aaaaaaaaa aaaagatctg agccctggtg gaggtaacag gatgcgatgg ttttcacatt 9420 caagaaggtt ctggagaaga gagatgattc ttggaatgat gagcttcaat ttgcacatgc 9480 ctgagtttag gttctgaatt taaaccctta ttgtaagatc atctctttga accttctctc 9540 tttttaaggg tttttacagt tcagtggcat ttttttttaa tatttaaaaa gtcattttag 9600 gagaaacatc catttaaata atttatttta cttcagaaag ttgttttact caacgaggat 9660 catgaactga gttgtgttct ttaacattca caaattgtgt attgcttggt tttggaaatt 9720 agttagccaa ataatttaaa aagcaccaga aattgaagtg caaaatagaa caggaaagag 9780

aaactctcca ttagtgtatt cagcttaaca ggttttcaac ccaccagggt gctgttggaa 9840 tacaattqtt ctcctgqttc ttatgataca agatcaaggt taaaccactg aatacagtta 9900 cagcatcctt qacttcataa gctttccttt ccatgcatcc atatagatgc ccaaagcacc 9960 attcagggca gaatttagtc tttcgtcccg cactctcaaa ggacaaccag gagctaggac 10020 ttggctgaac cacccaccta ccaggtgccc ctgcctgtgc caccatcctt gggccaaggg 10080 gaggeetgge ceetgeeace teagegatgg tgaaggatea geecaettgg ggeeegggge 10140 gcctggctga gcgcccctc cactgagccc gttcctgtgc ccccaatttc ccacaggctg 10200 aggccccagt gccctgctcg tgctgctgag ggggctgaat ggcctgttga gaggcctccc 10260 caggaagccc atagggagga ggttggggtg tctcctgcct tgggggtggg acagtccctt 10320 cttgttccca ccccaggtac ctgacccaag ttctcctgtg catgaggaat gcctggatgt 10380 ccctccttgg taggtgggat ggcccagagg gaggtcctgc ctacacagcc cttaattagg 10440 aatttagaga tttgtgctct aggaaggagc tgcttccgct accatttggc caactgtgtg 10500 ctgtgcagac ccgcagcttg gaaacaggtt tcaaggatgt tcaggacttg cctcgtgttc 10560 ataaaggtca ggggtcgcct cttccccctg ctcccctgct aactctgcag caggccctgg 10620 actaattaag teecegeaac ageeeegaga eecaggetet gtgaaagttg teagaatcag 10680 aatggagcca cttctgtcca accctaagag caacaacaaa atcatgcggc cgggaggttc 10740 tgaaggaggg ccctcccgca cacctgccta tgatcagagc ccttccgaag cctctgggaa 10800 gggcacagat gcctgcaaca agacettttg ccaggacttt acaggacttt gcagetcact 10860 acgtgagtca caaggacggc tagccggctg cacaagaaca cttgcctgat acgctgtgtc 10920 cactegtaaa ttgacgteca eteetgggat aageeetgg aaccagtgtt etetteettt 10980 caaaataacc atgtagccag acttggtggt gggtgcctgt aatcccagct acttaggagg 11040 ctgaggcagg agaatcactt gaacccagga catggaggtt gcagtaagcc aagatcgcgc 11100 cactgcactc cagcctgggc aacagagcaa ctcaagaaaa acaccaccac caccaccac 11160 accaccacca ccaccaccc ccccaaaaaa ccgaccatgc actgctcctt tcacctttca 11220 aagccccct tgcctcccct cctccgatgc gcccctagtt tactaaggcc ggggctctgc 11280 atgcagtgct gctgcttatt cccagttaaa ctccatagtt ttggagagcc tccctctgtt 11340 tcttgaggtt gacaggacta tcattctttt cgttcataga tgagggaatt aaggcttgga 11400 gaggttccgt tctgaaggac actcagtaag tggtggacag agaatttcag ctcagatcca 11460 aagcctattt aatttacttc ttttaaatcc atgcttctta gcactcagct agtcacgtat 11520 caccttgaca actttttgcc gtagccacat tactgcctgt ggtatgattt gctgaatatt 11580 tttctctaca taagctcaga ttttccttaa atctgttagg aaacctataa ctgaaaaatg 11640 gaagaccact atetettgee gtaaacagaa gcaactgtgt attecacaca caccaaaage 11700 aatgttetta cageeteett agatgetetg agtetaaage atgetttate ttgttaaagg 11760 ggggatggca aagttagggt gatagtgaag acatagaacc aactgagatt ctctccttga 11820 cattatcaga agggttggaa gacaatcaaa aaataaccag ctgggagcgg tggctcatgc 11880 ctgtaatccc agcagtttgg gaagccaagg tggccagatc gcttgagccc agaagtttga 11940 gaccageeta ageaacacag caagaceteg tetetacaaa aaataetgge teegcaggag 12000 gctgaggcag gaggatggct taaacccggg aggccaaggt tgcagtgaat tgagatcaca 12060 ccattgcagt ccagtctgga tgacaaagct agatcctgtc taaaaaaataa ctttctcatc 12120 gtgaagttta atactattta atgtcttgtc tgatggcagc taaaacatgc cccataccac 12180 ctaatctgga gtaccacact ttggaaataa gtgtgtgtca cattttggaa aatgctgatt 12240 gcgatgaaaa tgggaaacat ggctggaacc catcatctaa tccggatcac actgcatcac 12300 tgcatagtgt tcactccttt ttctgtcttt gtttttaaga tatgtcacac acgatgaaga 12360 gtgcagaaaa cagaaaggta tggcctaaag aagaattaca gaattgaaca ccaaagtaac 12420 cgccacccag atcaagaaat tgattgtggc cagggttccc ccacaccacc ccataccttt 12480 cccatcgaaa acactattct ttcttaccac tgaatttttt ttcttttct ttttaaagat 12540 ggggtctcac tatgttgccc aggctggtct taaaactcct gggctcaagc agtcctcctg 12600 ccttggcctc ttaaagggct gggattacag gtgtgagcca ccaccccga ccaccactga 12660 atatttggat actcatttta ttttcatagt ttttttgttt tgtttttgag acagagtctt 12720 getetgteae eeagaetgga gtgeagtgge atgatetegg ettaetgeag eeteeaeete 12780 ccgggttcaa gtgattatcc tgcctcagcc tccagaatag ctgggattac aggcacatgc 12840 catcacaccc agctaatttt tgtattttta gtagagacgg gggtttcacc atgttggcca 12900 ggctggtctt gaactcctga cctcaggtga tctgcccacc tcagcctagt tactgggatt 12960 acaggtgtga gctactgcac ccagcctctt ttcatcgttt tatcccccat atagtttagg 13020 tttgccccat ttgaacttca tgtatgtgta agatatattc tatcctatgt gttcctttgt 13080 gatttgtata ttttgttcaa ctttatgttt gtgagattta atctgttgta tgttagaaaa 13140 gcctggtcat ttccattgct gtataatatt ccagttatga aactcctgac actttttctg 13200 ctgttgatga gcatttgggt ttttcagtgt ctggctattt aaacaatgcc actttgcaca 13260 cgttggtgct tacatcctgg gacacgtgtg ccaagtttct gcaggacact ttcccgggat 13320 ggaattgetg tateetggga tgtgeaeaae ttgaegteet gaatgatget ettgagtetg 13380 gtgtgtgggg cgcctattca tccacctccc tccaccctac tatgggtgga tttttaggtc 13440 ttgattggac gccttttcac acatttactt ttgaactcag cctgaggtta ccaaaccctc 13560

tggttgaggc tacacctctg ggtgtgccca gggctgctgg agaatagact ctccctggag 13620 cttcatctac ctgtgcaagg gaacggggtc aaactcaagt gtacaagctg ctctagaaga 13680 tgcagcccag gcctggctgg cccagggcac tggtccctcc cccggcttcc tcctccagga 13740 agaggtgtgc acacccacag gcgtgtacac gtgggcaagg ctggcccagc ccaggctgca 13800 atcatgacaa agacaaggct ccacttaatg ttgtcaccac ctgccccacc ctttcccaca 13860 gcactggaac tetgggeeca ggeteetgee ageceeacet gtetgggeea tggetggtga 13920 gaaaccaagg ggtgccaggg ctgccagacc accctaccta cctacttccc gctgtctcca 13980 ggactcatgg cattaggagg ccaaacccac actgtggcct gggctgtgtg cttcgagctt 14040 cacctccctt cagcaccaga acagggtctg gctgtaggtg gctcccagga aatacagaaa 14100 aaatgggtga atgaacaagt gacagggtgt cttgttccac acaagacaca gtgagtggga 14160 gtgggggtgg cttctggctg caggatgcac actgccctca cccagatggc atctgccccc 14220 aacaccccat tettgeetgg cagacacegg ggeecaceet gagetgeett tetcaggace 14280 ccaggccagg caagccacag cctgccactc ccttcagcca gtgtggcttc aggtcaccaa 14340 cctggggcag gatcaagctg gcaacaaggg aaggggccgg gacacagtcc tccctgattt 14400 aaactctaat ctcagcgtct gtgcagtcca gctcctccag gcgctggccc aggacatact 14460 tgatgtcttc caccagctgc cacacctgca gagtcgggtc ggggagcaag gatcagccca 14520 gcagcettte actetggtee ategeteetg gcatgaggag tgteeceate tttaggcace 14580 acttacaaag cccagagett ggttetgage accaagagga aaccetggag atggggatee 14640 aggecetgea ecceegacaa taageteaga ggetagaaga ggaaactgee ecagtaacca 14700 ccctggacat cccttaaggc catgcctccc gagcaaggct gagaaggctg ggcaggggct 14760 tcgtggagtg ggtcaccttc cgctgacaga ccaggtaggc ttcctggagg aggaggcctg 14820 tggaggagca gcctggagcc tcagaatagg ctgagccttt agcagggcct ggtgctactg 14880 gctgcagggg gacgtgtggg gctccccttg ttaggaccat ggcctcagga gggatccacc 14940 ctcagttcag caccagcctc cccacgttaa accagggtaa cccaccttgg cagtcgagaa 15000 gtgttcatgt acaaagaggg caccaagtgc cataccaaag tggtggttgg cctggcccag 15060 gcagaceteg gccagetect gcagettgtg gettecetet gtetecegtg ccaaeteetg 15120 cagtgcctca tggaatggca gggacaggtg ctcactcaga accaccacca cgcgccacac 15180 taggtagttg tgcaggatcc tcgggccagg tgaagccagt ggatgtccag acagacgtgc 15240 atatgggcca ccaagggcac cacccccacc tgtgcccccc agcctgtggc tggacccagg 15300 acccagacaa ccccacaaag aaggggcagg aggtcatccc agaaaatgca gagcagcggg 15360 gagagecagg atgteaacet agggetetgg atttetatte tagtgeteaa cagetgeete 15420 cctcagtgtg gctaccggac acaggtggag gtgggaattc aaagcccacc cagcagacag 15480 gtcctagagg ccggtggaca ggggctagcg gatctgcagc cgtccctatg gggtgcggag 15540 tggatgaget gggtcacctg ctacacttag tccgtcgcca gcactagcac ctcctcttcc 15600 tctgagaacc agtaaaactc ctggcacggg tcgatgctgg catccaggtt ggccgccagg 15660 aagcgagcgg cgcgcgcgaa ggccttgcac tcggggcagg cgccgccgcc cgccgcgacc 15720 ggtccaggta cctgagcgcc agcaaagccc ccaggatggc gcagaggccg gcggcgaata 15780 ccagccccga cagcaggete acetegegeg ggttecagag etgeageeeg geccageeec 15840 ggtggcgctg cttcccgaga gaagcctgag gggcagagag gccccgcaca ggcccccagt 15900 gcctcaagta cttgacctcc tggaactcgt ggtagtgcgc cctcagcgaa taccgggact 15960 ccaaggegee gaggeegeeg eggtgeagee etgggeeace tgggetaegg gatgegegeg 16020 gccgccggcc tcctcgtggg cctccgcttg gccccgggac gcagctgcgg gaaaaacagt 16080 gtcaagctca ggagggccc cagcctgacg gagctcccgg gcaccatgag gagggacgca 16140 ggtctgggta cagaggcccc agctgcggac ctcattcacc gcggaaacca gggacgagga 16200 gggctcggcg gggccacgaa ccccgcgtgc acagtggagt cttctcccct gtcccctccc 16260 tgcacacatg tgtcggtccc tgggttggga gggccttgat gggaagcggg aggggccggg 16320 cacggggcct ggcacgtagt gggccttcat tgaaaggcca tccctcttcc cttcgccttt 16380 cttgtccacg acctacccca gccaaggccg ggtggggtga gagggaagga gccgaggctg 16440 aagtgaggag gtggggtcag gggcccgtct atgcagcact ttcagctctc cgcgctggac 16500 ccagacagac gctccacaaa gtggccaaag aaccaaactt tgtcctcgca gaagtccgca 16560 ggatcgacca ctccaacccc gctcgctggc tccttctact cggtggcccg acggctcacc 16620 cgccccttcc tcaccggcgc gcgccaacgc cccagggtgg cgaatacaca gcccaccctc 16680 tggacggccc tgatggagaa cccgagaccg gctcagtctc cccgaccctc gtctctgtct 16740 ctgccccggg ccaatcccgg cttcaacagg ttctccccag aacccaaact tgggtgaagt 16800 tcagtccgtg gagcccgaga gcgaagcctg ggagccgcag cctgagccgc gaggaagtag 16920 atgaagccag gaggctccgc gcagcggccg caagggcggc ggaggtggcc gctgtggtgg 16980 ccacctagcc ggcaggtgcc cacccaaggc aggacctgga gcggcgccgt tgcctgtgtc 17040 totcagegee etetgeetet tetgeeteae eccegeeege eegteggeee gaggagggg 17100 acgcgatggc ggctccaccc ttcttcgccc gccccgcgct cccctccttc cttctgcgac 17160 cctcgggccg cctggcacag cggcggcagc gcggacgtgg gttggcggcc gcggagacag 17220 gctcccgagg gtcgtgcgcg ggttgcagtc ggtgactcgg ggtccagctg cgtcccggga 17280 caagtgaagg cagcgggtag teeegggagg agteeette gateeeaggt ceeeactegg 17340

agccgcccac cagcctgctg gaaaggggct ggagctacgc agctgggggc cgtcatgccc 17400 cageceaeag ecetggagea eegeeeaggg aggaeteete etaaaggata agggggeeet 17460 gatggagtgc ccgggctgcc cgcacagcgc ctgcgcggag cgcaccttca ccagggagct 17520 tecttqtect cetqqqaaac ettqtecaqq atcagetete eeeggggggt etgggettet 17580 ggttggcctc gcccccttcc cccagctcct gatccaggga gagcaacgga gagccctgcc 17640 agaagaaggc ctgggcctgc gagtgcggcc cccatggtac caatgcacag ttgacccaga 17700 gcacagcaat cgcggccaat aggaggtgac gtgggtttag cctctgacca cacagtcctg 17760 gtcaccctgc acagactgcc tttattgggg gctccgaggc ccagctcctt ggctcttctg 17820 cagtttcaca taaagggaag cagccagccc tccggctccc tcactctttt ggggtccccc 17880 acccctaatt gctaaagtga ccccttgact cacaagcaag agaatgatag gccacagcgg 17940 tgcccagcta aactcagcca agccctgagt gaggcagctg gatacgcagc gtgggtgttg 18000 gcggtagggg ctgggggcag tgggggtgga ggctgtggcc agagctgcct tggagagaa 18060 aggcccagga gggtgcaaag ggcagaggtg agaggttccg aatcccaacc tccgtctcct 18120 ccctgaggaa ggcagatccc agccagtctt gcctgtgaaa gttgtcagaa accaaatgga 18180 gtcacttttc ttaaaaactc tgacaaatag aggcaggaaa ggccatgagt ggagagtcct 18240 cgggcacaaa acctgatgaa aactatcaca aaagactgca aacaaccact tgcgcaaagg 18300 ccatggcaac cttcacaaaa aatatacaca cttttgcaaa gacatctgcc cagcaactgc 18360 ctgtccagcc tcagactggt gccacccgtg tcctggtaga caagaataat cgtcacaaaa 18420 caatcctgtg attctccctt ttcctttaaa aacacatgca gacacatact tgaacacaca 18480 tqcacacaca catqcaqatq cccacacatq cacacatqtg catatacact cacacqtgca 18540 tgcacacata catgcatata cacacgtgta cacacataca cacacacaca gggtggctcc 18600 cccaqqqqac tttqccatqc ctcattttqc ccatctgtaa agggggtgat tatagcccct 18660 actgcatgat gctgccgtgg ggctccgtga gtccgtacct ggaggatgcc taggacgggg 18720 tctgaactaa acctgtacag tcccatgggg agctgagtgg agaaggtggg ctttgacatg 18780 gggagcagag ggggcagtgt ggaaacccag ggagcctaag ggtctgggca cctgtcacct 18840 aataggaggc cccaaggggc ccctggggaa gaggcaccga cctccttgtg gctggtaagg 18900 gaacaggget gaggecagga acaggecagt gagageetge aggggecagg gagtgtgaca 18960 gccaaggacc ctcagggcac tagcctgctg aggaccccag gccacactca ggcctgggca 19020 agggactgat ttggggactc cttgaggttt ctgactcaag tgattgcaca tgaggttagg 19080 agttcgagtc cagcctggcc gacatggtga aaccccgtct ccactaaaaa tacaaaaatt 19140 agctgggcat ggtggtgcac gcctgtgatc ccagctactc gggagactga ggctggagaa 19200 tcacctgaac ccgggagggt tcaagtgagc tgagattgca ccactgcctc cagcctggac 19260 ctggtggggg agatttgtaa ctgcatcaga ataatctggt tcaactttgt ttttattttt 19380 tatttttttg agacagagtc tcattttgtc acccaggctg gagtgcagtg gcacgatctc 19440 ggctaactgc aagcactgcc tcccaggctc aagtgattct catgcctcag cctcctgaat 19500 agetgtgact acaggtgcac accaccacgc aaggctaatt tttgtatttt tagtacttcc 19560 tgctgattag ggatgtaggc cttggttaga ggaatgaaat tgtttttagt agagatgggg 19620 tttcaccatg ttagtcaggc tggtcttgaa ctcttgacct caagtgatcc acccatctca 19680 gcctcccaaa gtgctgggat tacaggcagg agccactgtg cccagcttgg tttaattttt 19740 atgtaacaaa gttgtgagtt gtttttcagc ggccgtggac ccccaggtta aagttcgcat 19800 accttgagca tgcccaggtg aacaaagcat gccaccatag ggaggaccta agtgctccaa 19860 ccaaggagca agaactgaat taagaagcag atggggggga ggagccaaga tggccaaata 19920 ggaacagctc cagtctacag ctcccagcgt gagtgatgca gaagatgggt gatttctgca 19980 tttccatctg aggtaccagg ttcatctcac tagggagtgc cagacagtgg gcgcaggtca 20040 gtgggtgcgt gcaccgtgcg cgagccgaag cagggcgagc cattgcctca ctcgggaagt 20100 gcaaggggtc agggagttcc ctttcctagt caaagaaagg ggtgacagac ggcacctgga 20160 aaatcgggtc actcccaccc gaatactgcg cttttccgac gggcttaaaa aatgccgcac 20220 caggagatta tatcctgcac ctggctcgga gggtcctacg cccacagagt ctcgcggatt 20280 gctagcacag cagtctgaga tcaaactgca aggcggcagc aacgctgggg gagggggcgcc 20340 tgccattgcc caggcttgct taggtaaaca aagcagccgg gaagctcgaa ctgggtggag 20400 cagacaaaca aaaagacagc agtaacctct gcagacttaa gtgtccctgt ctgacagcta 20520 tgaagagagc agtggttctc ccagcacgca gctggagatc tgagaacggg cagactgcct 20580 cctcaagtgg gtccctgacc cctgaccccc gagcagccta actgggaggc acccccagc 20640 aggggcacac tgacctcaca tggccgggta ctccaacaga cctgcagtcg agggtcctgt 20700 ctgttagaag gaaaactaac aaacagaaag gacatccaca ccaaaaaccc atctgtacat 20760 caccatcatc aaagaccaaa agtagacaaa accacaaaga tggggaaaaa acagagcaga 20820 aaaactggaa actctaaaaa gcagagcacc tctcctcctc caaaggaacg cagttcctca 20880 ccagcaacgg aacaaagctg gacggagaat gactttgagg agctgagaga agaaggcttc 20940 agacgatcaa attactccga gctacgggag gacattcaaa ccaaaggcaa agaagttgaa 21000 aactctgaaa aaagtttaga agaatgtata actagaataa ccaatacaga gaagtgctta 21060 aaggagetga tggagetgaa aaccaagget egagaactae gtgaagaatg cagaageete 21120

aggagccgat gcgatcaact ggaagaaagg ctatcagcga tggaagatga agtgaatgaa 21180 atgaagcgag aagggaagtt tagagaaaaa agaataaaaa gaaacaagca aagcctccaa 21240 gaaatatggg actatgtgaa aagaccaaat ctacatctga ttggtgtcac tctgaaagtg 21300 acagggagaa tggaaccaag ttggaaaaca ctctgcagga tatcatccag gagaacttcc 21360 ccaatctagc aaggcagccc aacattcaga ttcaggaaat acagagaccg ccacaaagat 21420 actectegag aagageaact eeaagacaca taattgteag attegeeaaa gtagaaatga 21480 aggaaaaaat gttaagggca gccagagaga aaggtcgggt tacccacaaa gggaagccca 21540 tcagactaac ageggatete tcagcagaaa etetataage cagaagagag tgggggecaa 21600 tattcaacat tcttaaagaa ttttcaaccc agaatttcat atccagccaa actaagcttt 21660 gtaagtgaag gtgaaataaa atactttaca gacaagcaaa tgctgagaga ttttgtcacc 21720 accaggeetg eectaaaaga geteetgaag gaagegetaa acatggaaag gaacaactga 21780 taccagctgc tgcaaaatca tgccaaaatg tacagactat cgagactagg aagaaactgc 21840 atgaactaac gagcaaaata accagctaac atcataacga caggatcaaa ttcacacata 21900 acaatattaa ctttaaatgt aaatggacta aatgctccaa ttaaaagaca cagactggca 21960 aattggataa agtgtcaaga cccatcagtg tgctgtattc aggaaaccca tctcacgtgc 22020 agagacacac ataggeteaa aataaaagga tggaggaaga tetaccaage caatggaaaa 22080 caaaaaaagg caggggttgc aatcctagtc tctgataaaa cagactttaa accaacaaag 22140 atcaaaagag acaaagaagg ccattacata atggtaaagg gatcaattca acaagaagag 22200 ctaattatcc taaatatata tgcacccaat acaggagcac ccagattcat aaagcaagtc 22260 ctgaqtgacc tacaaaqaga cttagactcc cacacattaa taatgggaga ctttaatacc 22320 ccactgtcaa cattagacag atcaacgaga cagaaagtca acaaggatat ccaggcattg 22380 aactcagctc tgcaccaagc ggacctaata gacatctaca gaactctcca ccccaaatca 22440 acagaatata cattttttc agcaccacac cacacctatt ccaaaattga ccacatactt 22500 ggaagtaaag ctctcctcag caaatgtaaa agaacagaaa ttataacaat ctctcagacc 22560 acagtgcaat caaactagaa ctcaggatta agaatctcac tcaaagccgc tcaactacat 22620 ggaaactgaa caacctgctc ctgaatgact actgggtaca tgacgaaatg aaggcagaaa 22680 taaagatgtt ctttgaaacc aacgagaaca aagacacaac ataccagaat ctctgggatg 22740 cattcaaagc agtgtgtaca gggaaattta tagcactaaa tgcccacaag agaaagcagg 22800 aaagatccaa aattgacacc ctaacatcac aattaaaaga actagaaaag caagagcaaa 22860 cacattcaaa agctagcaga aggcaagaaa taactaaaat cagagcagaa ctgaaggaaa 22920 tagacacaaa aaacgettea aaaaattaat gaateeagga getggetttt tgaaaggate 22980 aacaaaattg atagaccgct agcaagacta ataaagaaaa aaagagagaa gaatcaaata 23040 gatgcaataa aaaatgataa aggggatacc accaccgatc ccacagaaat acagactacc 23100 atcagagaat actacaaaca ccactatgca aataaactag aaaatctaga agaaatggat 23160 aaattcctca acacatacac tctcccaaga ctaaaccaga aagaagttga atctctgaat 23220 agaccaataa caggatctga aattgtggca ataatcaata gcttaccaac caaaaggagt 23280 ccaggaccag atggattcac agccgaattc taccagaggt acaaggagga actggtacca 23340 ttccttctga aactattcca atcaatagaa aaacagggaa tcctccctaa ctcattttat 23400 gaggccagca tcatcctgat accaaagcca ggcagagaca caaccaaaaa agagaatttt 23460 agaccaatat ccttcatgaa cattgatgca aaaatcctca ataaaatact ggcaaaccga 23520 atccagcagc acatcaaaaa gcttatccac catgatcaag tgggcttcat tcctgggatg 23580 caaggctggt tcaatatatg caaatcaata aatgtaatcc agcatataaa cagaaccaaa 23640 gacaaagccc atatgattat ctcaatagaa gcagaaaagg cctttgacaa aattcaacaa 23700 cccttcatgc taaaaactct caataaatta ggtattgatg ggacgtatct caaaataata 23760 agagctatct atgacaaacc catagccaat atcatactga atgggcaaaa actggaagca 23820 ttccctttga aaactggcac aagacaggga tgccctctct caccactcct attcaacata 23880 gtgttggaag ttctggccag ggcaattagg caggagaagg aaataaaggg tattcaatta 23940 ggaaaagagg aagtcaaatt gtccctgttt gcagacgaca tgattgtata tctagaaaac 24000 cccattgtct cagcccaaaa tctccttaag ctgataagca acttcagcga agtctcagga 24060 tacaaaatca atgtacaaaa atcacaagca ttcttataca ccaacaacag acaaacagag 24120 agccaaatca tgagtgaact cccattcaca attgcttcaa agagaataaa atacctaggg 24180 atccaactta caagggatgt gaaggacctc ttcaaggaga actacaaacc actgctcaag 24240 gaaataaaag aggatacaaa caaatggaag aacattccat gctcatgggt aggaagaatc 24300 aatattgtga aaatggccat actgcccaag gtaatttaca gattcaatgc catcccaatc 24360 aagctactaa tgactttctt cacagaattg gaaaaaacta ctttaaagtt catatggaac 24420 caaaaaagag cccgcattgc caagtcaatc ctaagccaaa agaacaaagc tacaggcatc 24480 acactacctg acttcaaact atactacaag gctacagtaa ccaaaacagc atggtactgg 24540 taccaaaaca gagatataga tcaatggaac agaacagagc cctcagaaat aacaccgctt 24600 acctacaact atctgatctt tgacaaacct gagaaaaaca agcaatgggg aaaggattcc 24660 ctatttaata aatggtgctg ggaaaactgg ctagccatat gtagaaagct gaaacttgat 24720 cccttcctta caccttatac aaaaatcaat tcaagatgga ttaaagactt aaacgttaga 24780 cctaaaacca taaaaaccct agaagaaaac ctaggcatta ccattcaggg cataggcatg 24840 ggcaaggact tcatgtctaa aacaccaaaa gcaatggcaa ccaaagccaa aattgacaaa 24900

tgggatctaa ttaaactaaa gagcttctgc acagcaaaag aaactaccat cagagcaacc 24960 tacaaaatgg gagaaaattt tcgcaaccta ctcatctgac aaagggctaa tatccagaat 25020 ctacaatgaa ctcaaacaaa tttacaagaa aaaaaacaaa caaccccatc aaaaagtggg 25080 cgacatgaac agacacttct caaaagaaga catttatgca gccaaaaaac acatgaaaaa 25140 atgctcacca tcactggcca tcagagaaat gcaaatcaaa accacaatga gataccatct 25200 cacaccagtt agaatggcaa tcattaaaaa gtcaggaaac aacaggtgct ggagaggatg 25260 tggagaaata ggaacacttt tacactgttg gtgggactgt aaactagttc aaccattgtg 25320 gaagtcagtg tggcgattcc tcagggatct agaactagaa ataccatttg acccagccat 25380 cccattactg ggtatatacc caaaggacta taaatcatgc tgctataaag acacatgcac 25440 acgtatgttt attgcagcat tattcacaac agcaaagact tggaaccaac ccaaatgtcc 25500 aacaatgata gactggatta agaaaatgtg gcacatatac accatggaat actatgcagc 25560 cataaaaaat gatgagttca cgtcctttgt agggacatgg atgaagttgg aaatcatcat 25620 tctcagtaaa ctattgcaag aacaaaaaac caaacaccgc atattctcac tcataggtgg 25680 gaattgaata atgagaacac atggacacag gaaggggaac atcacactct ggggactgtt 25740 gtggggtggg gggagggag agggatagca ctgggagata tacctaatgc tagatgacga 25800 gttagtgggt gcagcgcacc agcatggcac atgtatacat atgtaactaa cctgcacatt 25860 gtgcacatgt accctaaaac ttaaagtata ataataataa attaaaaaaa aaaaaagcag 25920 ttggagetet ggtgteacee ceatggeagt ttecagtaae ateacacete gttageetat 25980 gcttctaaaa tttgacccag tgcccagctc agagacacac tgccttggga actgtccctg 26040 ctggttccct gttacaagta acaaaatccc attgctaaat cctccttggt tatggtcact 26100 gggtgatcat tgggtgatac caatattgag gcaggagaat agggtctgga cacagggaac 26160 ctaagcctgt ttcacaccga cttcctagaa ctaaattgaa ggcagaaccc tacctttcca 26220 tgcctaagta acaaaaggac cacaggctac tccctttgca accccctcac cttttctgct 26280 aggcagatgg gaaattggct gtccacaacc aatcagattg attgaaggtc cagtctttgt 26340 ttgccacttt gtaacttcac tccagcctct gaatggctgc tgtccacaac caatcagact 26400 gattgctggc cacatcttcg tttcaataga agtataactt tgtaacttca ccctagtctc 26460 tgattggttg aacaggagtg taacctttgt aacttcactt cagcctctgg ttggctgctt 26520 tctgtaacca atcagactga ttgcaggcca ccacttcatt tacatgaggt gagcatgatg 26580 tggccaatgg gaaacttcta gaggatattt ggacccaaga agattccgta tctgggccct 26640 tgagctgctg ctcggtccac tcccaaacca tggagtgtac tttcgttttc gataaatccc 26700 cattttcatt cttttgttgc ttcattcttt ctttgccttg ctgggcattt tgtccaattc 26760 tttgttcaat aggccaagaa cctggacaac ctgcagtcac aaccctccac cagtgacaat 26820 atagtttaga tttgtgtccc cacccaaatc tcatgttgaa ttgtaatcct cagcattgga 26880 ggagctccct ggtgggaggt gactggatca tggggtagga ctttcccctt gctgttctcg 26940 tgatagcgag tgagatctca caagatctgg tcatttaaat gtgtgcagcc cctcccctc 27000 ctctctctt tcctcactct ctggccatgg aagacgtgcc agcttcccct ttgccttctg 27060 ccatgattga aagtttcctg aggcctccct agccatgctt cctgtacagc ctgtggaact 27120 gttagccaat taaacctctt ttcttataaa ttacccagtt tcaggtgttt cttcatagca 27180 ctgcagaatg gacgaataca ctcatggaga gacaggatcc acctgctgtg tggtaacatc 27240 ctgacccagc acatctgggg cccatcaagt ctccatgggg tggtgggagg agcattaaca 27300 acaaaggcag cacctggcac cttctgcggg cgatgggaag actgagggca ggaaaagcaa 27360 acatgctcag cactgtgctc agcccagggc gactctgaga caagagaggg gccagagccg 27420 gatgcagctg ggaggtggca gccttaccag aggtttgagg agtacatggg aaagtgcaca 27480 gageceagee caggatggea getgtgetet eattttettg cageetttag gggetaeetg 27540 gctggggtgg tggccctgct gaagagaacc tgcccctagc aggcatgggg gcaagagcac 27600 ctttcaaagg tgaacaaatg tgttccaatt tgcagcagca aagctgccag aggtcccagg 27660 aageceaggt teateteatt taeetageea tetetggeag eattggtatt tgagagegtg 27720 tatgcgggca gaagaggga aaaagacctg caccagaaca cctttccaga acacccttct 27780 ccettgaaca cetgagtgee tagageeeag eeccagetee cageaageee eeteeeeaaa 27840 accactatag ccactgggcc tccctttggc aaggcctgag ggcccaaatg tggccaccta 27900 gcctctgggg acttccgtcc tttggagcta gaaaaacagt agctgaatgt gcctggctgc 27960 agcagggccc cgccgactca cctatagaaa ggccctgccg tggactaagc ctcccagcct 28020 aggaaacctg gctctggcct cccctgcagg catgtgatgt ttggctccag aggccttctc 28080 ctctgggctt ttccatgcct gtgaactggg ccccattcat ttctctgtgg tttcatggga 28140 acgtccaatg cattcaggag gttgcagtgc acccaggagg agaggggtca gcgagaggcc 28200 tgagctgtga ctggtgggcc acccagaggc cacggcaccc tctgctggag actggcagca 28260 gggtgcatgg ccagctgtgg gcgagggtcc atcagtcaag cagctacact tcctcccggt 28320 geceteect gacceaggee agggetetg cetgeagetg ceteacteea ggeeteeact 28380 ttccagctcc caggccccca gccccacctg gcctggcccg ggacagagca gccaccaaga 28440 tettttecae tttecetece cageageetg caatteagtg ceetgeagae eeetgeetee 28500 cggggccctg cggtttctac cacactacac tcaatttccg gccactaaga acacggcagg 28560 tcccgcgtaa aggtggccgc cacctgcgct ctgagggctg cccagccacg gagaagtggc 28620 tgtgctcggg cactctgctt ctgagacagg cccagcagct gccttcatgg cctcaggaga 28680

gcccacaggc tccaagcctg cagtaaggac ctgcctaagt ccttgaaaat ttggtgttca 28740 gaagaaatga aagtgaaact ggctgggagc aattcttttg attttgtttc aagacagggt 28800 ctcactcggt tgttcaggct ggagtgcagt catgcgatca tgggtcactg cagcctcaac 28860 ctcctgggct caagggatcc ctcctgcctc agcctcctaa gtagctggga caacaggcac 28920 attccaccac accaggctga ctttttttt tttttttt tttttttt tttttttgtag agatgggatc 28980 tcactttgtt gccaatgctg gtctcaagct cctgggctta agcaatcctc ccgccttgaa 29040 ctcccaaagt gctgggatga tgggatgata caccactccc tgcatgcaat acttaccaaa 29100 gttccacgtt agcagttttc agcaaaagct aattgaccaa gctctgtgag tggcctcatt 29160 ccattagcag gagcctccca cagaatgtga cagaatggtc ctggtggctg agggtagaag 29220 gggctgcttc tcttaagtct ttgaagatga atgcagttca gctttggcca acagccatgc 29280 cettetgece aggeceagat caacttttaa teattteeaa agecagtetg actgteetgg 29340 gaaaggaagg gttggggtga atttcttatc aatttggcag gtacattgga tcctgtgagg 29400 agagtatgag actgtacgag gggtccctgt gctagcccca aatgagagcc ctgactccca 29460 cctacccagc ccacccgccc cgcactgctc agctcagttc tccgttccgg ggatggagtg 29520 ctgggcttgg cctgcacctt tctgtcccca aactccactg gggacccacc ttctagtcac 29580 cccagggtgc catcaccaga gccaggggct agccccacct ttgctcactc ctgctcggag 29640 cccacctctt ctctctgccc ccatcgctac ctgcagcatc agaaggactt gagggcacca 29700 aacagcccct gcagctgtcc tcaaacatca tggccaaggc tgcgcctggg aagtggactc 29760 tctgcggtgc cagctcccta ctcactgccc ttgacttttg tctgggtccc tgcttgatgt 29820 ggcccaactg gctgggccag agccccacag gcgctgtccc gacccccagc cccctagagg 29880 gagggagagg ctgagacggc aagggaagca gagactcagc cacaccaagg gccctggcaa 29940 ggtgggcctc tcctccaaag cctcaccagg cttcacgttc aaggtcacca agagtgcact 30000 tgttctctgt cgagggcaga ggtgactccg gggactgtgc tggggtccag ggagggcagg 30060 cagcggagtt gccagggaag cagcttgcct gaggtctgtg gtcttggcag gggcttccgc 30120 agcagececa ecetetecet tteecetece teetgteett gteetegtgt ttaetgaaga 30180 ccatgagaag ggatgtggag agcccctgca ggaactgaga gcaggagcct ggctcagccc 30240 tgagaggccc ccagatattc agttcctaaa cccatagagg gtggggcatg ggcacagagg 30300 agtaaccagg ggccacctca cacagccctg ctctttcacc ctgcccgcct ggtggcctcc 30360 ttagcctgca gcctcagtgc tgcccgatct ggggccatgc tgcgtcctgc tggccacact 30420 gcaaaatgca gcttaaggtc ggcctggaag ctccaggtgt ccttcttccc ctaggcctac 30480 agctgggctg gagggggaag gggcaccagg aaacagcctg gatgctcctg cccaggagga 30540 ttgtccgact ccatggggag aaagtccgtg cctggcacat ggtaatcttt gtggagcgag 30600 agggcaaaag tatgcatgat tgtgtgcatc tgaagcattt ctgtgctgat ggcctgaccg 30660 aaggcagatg acaaatcatg cagatatttc tgcagcagga atggctgcat tctcctggct 30720 cgcctgccag ggagctcaga ggtgcccttg cccgggaatc cgatggcaga gagttaccag 30780 aaggtetgeg gtgeteetgt teeteggeee eggtgagagg tgacagegtg etggeagtee 30840 teacagecee tegettgete teggeacete etetgettgg teteceaett tggegteaet 30900 tgaggagccc ttcggcccac cgctgcactg tgggagcccc tttctgggct ggccaaggcc 30960 ggagccaact ccctcagctt gcagggaggt gtggagggag aggcgcgagc gggaaccagg 31020 gctgcgcgcg gagcttgcgc gccagctgga gttccgggtg ggcgtgggct tggcaggccc 31080 cgcactctga gcaggcggcc ggccctgccg gccccgggca atgaggggct tagcacccgg 31140 gccagcggct gcagagggtg tactgggtcc cccagcagtg ccagaccacc ggcgctgcgc 31200 tegatttete acegggeett agetgeette eegeggggea gggeteggga eetgeageee 31260 gccatgcctg agcctcccac ccctccatg ggctcctgtg cggcccgagc ctccccgatg 31320 agegecacee cetgetecat ggegeceagt eccateaace acceaaggge tgaggegtge 31380 gggcgcacgg ggcgggactg gcaggcagct ccacctgcag ccccggtgcg gaatccactg 31440 agtgaagcca gctgggctcc tgagtctggt gggggcgtgg agaatcttta tgtctagctc 31500 agggattgtg aatacaccaa tcggcactct gtatctagct caaggtttgt aaacacagca 31560 atcagcaccc tgtgtctagc tcagggtttg tgaatgcacc agtcgacact ctgtatctag 31620 ctgctctggt ggggccttgg agaaccttta tgtctagctc agggattgta aatacaccaa 31680 tcggcactct gtatctagct caaggtttgt aaacacagca atcagcaccc tgtgtctagc 31740 tcagggtttg tgaatgcacc gatcgacact ctgtatctag ctgctctggt gccagatttg 31800 tctcctggag agaggcatgg gcacctgtgg tctccccgcc tcctggcctc cccttgggtg 31860 cccttatgca gaaagggtcc cggccccagg cttgcttggc tttggggact gttttaaaag 31920 ggacatgaag aaagaagaag ccagagaatg gtccttggcc actctggatg gagtgtccgc 31980 tgagcagtag gaagagaact gtccctggct tgtctccttc cctgagtgac tgttgattca 32040 cagttetete tecaagggga catgggeetg tectaatget geettagggg ettggeteea 32100 gctgaccctg gggtctgcag gtcaccacct gcccctgtgc ctggctttga atttcctaac 32160 atccagagtg ccctgggagt acagtgtcca gcccgttgtg tgtagtaaac cgggagctga 32220 gcagaagagg aacgacagag tccacccgtt gaccctcagg gctgtgtgtc ctgaagttca 32280 agectagete accetgeagt gggtecagee ceacetgtae tgacagatgg caccageagg 32340 gagcgcagtg ctccactgcc acagttctct gtccccactt cagtgcagtc agccctggac 32400 ccccaccgc ctgctccctg tagcacacac agccacaggc cctcccagct cccgcccctg 32460

gcccttggtc actctcacct gctgcctcag ccgaaggtag ccggtagggc ctccctgaag 32520 ctccctccag ccagacaggg gtgggccagg gctgagggcc aagggccgcc tccaagcagt 32580 gaagccctcc agggtggaag ggcaggtggc cccctctgtg tcccgttccc ctaagtcccg 32640 gegagecete ecetteetee tgeggtgeee tetgeeetea tetatgtgee etggtggget 32700 ccccagcac tgcagcctcc cgggtggggt ttcaggaccc ccagggcctc ccagctcact 32760 cagaccccca coccettect gtagetetge tetetggeac cacetteect etettgggga 32820 caaccacagt ggagagaggc ggggctctct gcctgtccct ctattgcagg ggtgctggcc 32880 ttctggggtc cttttgagaa cttgatgaaa gcaatgagtt tacacccaag aaattctctg 32940 gcaccgtttg caccaacaac atgccccaaa ggtggagcca ggcccccagg ttgcattgtg 33000 taagtcttgg gagctctcag gatgcatcag ggacacgtgg cctctgactc gctcagctct 33060 gccctgaccc agggcgttca tcctggagca ggcctccgtt actgactggc gagcagaggc 33120 ttccagaggc tgagggaggg gcctggggtc ctcctgcagg gaccaagacg gagctgcgcc 33180 tcaacatcag gccctgccgt ccttgtctcc tcccagccgg gctctgtaca ggtcatcacc 33240 gtcttcagcc tgctggaggg ggtcctgcgg gcagccatgg ccctctagta tagcgctgtc 33300 ctgaagcggc caggcaccca gggccacctg ggccccgcgg gggaggagga ctgaggctat 33360 ctggccctgc tggcttttag aaataggaac tgttgatacc aaggggaatt tttaattctg 33420 tttttaaaat gtttaaattt ttctaactta aatttaatgt tttaagtttt taaatttaaa 33480 tttaattttt ttttagaaac agggtctcgc tctgtcactc aggctcaggg tatggtggca 33540 ccatcgcagc tcaagtagct tcaaactcct gacctcatat agtcctcctg cctcagcctc 33600 ccgagtagct ggggctgcag gcctgtgcca ccatgcccag ctgtttttgg gtttttgctt 33660 tggaaaaatg ggattteget ttgttgeeca ggetggtete aaatteetea teteaageaa 33720 tettettget ttggeetete aaagtgetgg gattatagat gtgageeact gtgeetggee 33780 tgtttttatt tttatttttg gattttattt tatgtttgcc tctcagtttt taagcaaact 33840 gcaaggaaga cggtggggct agaaggaagg ctgaggcctg gccagcaatg gcccagcatc 33900 cccctgagtg gccaaccccc ctttccccca ctgccctcct ctgcccaaga aatgagggct 33960 tttcagtaaa tccatgtcag ggagcaaagt caagtgtgga gtgccatctg gtgtgtgggg 34020 cgcctctggg aagcctgggc agcggaatgc ccccttgcac ccagcgcaaa ggacccagct 34080 taggetecaa eeettgetge tgageegatg teaceaceca gaacetteet gteagtteca 34140 gcacaattca gagctggctg cctggcagat tgatgctgga gtctcattct gcctgattaa 34200 aaatggaatt agtatgcagc actgagagcg cccccatcac cctgacacat gtgactatgt 34260 ccaaccetge ecceaettee tetetgeace ageteegeag gacetggtag gggteagggg 34320 tectgtgaca eccaetecte geagtteete aageageaet etgtgaggte etgtgeecag 34380 ctctggtgtg agtgggtacc ctggcagcgc caagggagcc tggacagagg agccggcctg 34440 ggcctggggg aggggaggag ggcctccag tgccttccaa accaggaggg gaaaccggct 34500 gctggtgaca cagcctggcc ccgttgacca cccagtgtcc caagcaccca cagatcccac 34560 ctgcctcggt cccgagcaga gctggccggc cactgggcag tcccttcccc agccagcctg 34620 accocagtet geacteette ecceteegtg ggggaagete tgtggettgg agteeeegag 34680 ggctgccaga aactaggatg aaagccatgg tgagcacggc ctctgttccc ccgcaccatt 34740 tcctggggtg tccggattaa caagctcatt tgatctggtt acagtgaatt ttcttcaaag 34800 aaacactcaa tagggtcctt gtcagagtgc ctcgcagcga cagtgactgg gtatggctgc 34860 ctttgttctg ccaccgtcag acggggctgg ctgtgggagg cgaccaaaga catcccgcac 34920 ctgccctggg agcctttccc tcctccaggg ctcagccacc tcaggcggcc ttcagtctgt 34980 gtgtcctgcc acccccaaga tgtcccagag gccacggtca ccccatctgt tcctgtcccc 35040 agaaccttct cctggagcca agtatctgca gggacagaca ggcgagcgtc tgggggtttg 35100 gtgttggggt ggagaagget gtggggtget geeceageee aggeageetg actgtgagag 35160 gttgatgtgg ggcacgttct tggcttgtgc atttctcgga tgaactgcat ctgttgccag 35280 tagaaagatg ctcacatgtc tttggctcaa gatcgacact gcctttggct caggttggga 35340 catcaactat tgctacagag cagtaatggt taaaaataag attttggaat ttattaaaat 35400 atttgtggct gggagcagtg ggtcacacct gtaatcccaa cactttgggg gaccgaggcg 35460 ggtggatcac ttgaggtcag gagtttgaga ccagcctgac cagcatggtg aaactccatc 35520 tctactaaaa ataataaaaa ttagccgagt gtggtggtgg gtgcctgtgg tcccagctac 35580 tcgggaggct gaggcaggag aatcacttga actcgggaag cggagcttgc agtaaattga 35640 aaaaaaattt gtaattgttc aaatacagtt tagactagga ttgacatgta aaaattttgt 35760 gagaggataa tacattttgt tttctccatt gtatgaaagc atttattgaa aatcaagtga 35820 catcttttac aagggaaaaa gtcacttgtt ctttaacata cagttttttt tcttagttct 35880 gaattagaaa tggcatctgt tttaggtctc aagatataac ttggctgttc cttactgtgt 35940 atgtatgttg ttttctgtag gtatagataa ttatatatag gccctgtacc aaatgggagt 36000 gatggtgtat ttaataactc tttaatacct tatgttacca aatataaagg ccaggcgcag 36060 tgggtcacac ctgtaatccc tgcactttgg gaggccgagg tgggtggatc acctgaggtc 36120 aggagtttga gaccagcctg gccaacctgg tgaaaccctg tctctactaa caatacaaaa 36180 attacctggg catggtggca ggtgcctata atcccagcta cttggggaggc tgaggcagaa 36240

gaatetettg aacetgggeg ggggggggag tggggggeag aggttggagt gageetagat 36300 ggcactgctt cactccagcc tgggcaaaag agcgaaactc cttctcaaac acacacacac 36360 acacacaca acacacaca acacacacc tttctctgtt gctcaggcta gagtgcaatg 36420 atgtgatcat ageteactge ageetegace aageegacte aagtggaett cetgeeteag 36480 cctccctggc agctgggact acaggtgcat gcacaaccac cacacccagc taattgtaat 36540 tttttggaga caaggttttg ccatgttgtc caggctggtc tcaagctaat gggctcaagg 36600 gatcettcag cettgteett ceaaagtgat aggattatag geatgageea etgtgtetgg 36660 ccttccttta aaaattttga aaacttggcc aagcttggtg gctcatgcct gtaatctcag 36720 cactttggga ggctgatgtg ggcggatcat ttgagatcag gagttcgaga ccagcctggt 36780 caacatggtg aaatcccgtc tctgctaaaa atactgaaag tagccaggtg tggtggtggg 36840 cacctgtaat cccagctact cgggaggctg aggcaggaca atcacttgaa cctcaggtgg 36900 aggttgcggt gagccaacat tgagccactg gattccagcc tgggtgacag atcgagacgc 36960 ttatctcaaa ttaaaaaaaa ttaaattaaa atttgaaacc aggggaccaa gttctgttga 37020 agacctggaa attccagtag gctgaagatc agtgcaacca ccgtggtcgg ccctgttgag 37080 gtgctgctga gcacccactc atctgtgggt gctgcggatt tactacactc agataaagcc 37140 agtgtttctg gagttcctcc aggggaaact ggtagagttc aaagcccagc caaagaccct 37200 aagaaatcat aaagggaaca tacgcttttc tggctgttac tgttctccag cgccttcttg 37260 cctctggatg gaaggacagc tcactgctta gtatttcaca agctcttgct tcatccgcca 37320 actcatccac tgttggatgt gtcaccgaag ccaatctgtc ctggatcaca gcgacccgtt 37380 aacccaacag ttcacagctt tttgcatgtc cctatctgaa catccaaaga cccctaaaag 37440 aattgtggac tggactgagt actccttacg tggacccttt tagggaccac gaagcccccg 37500 tttctattgg gcatcccagt tgggctattc ccttaccctt gctaaaagaa ggcgagctcc 37560 tetttteeet tgatggtgag eeagagagea etceatetga tgggeaggee ttaatgagte 37620 aggaagtett tegggeaggt gtgaetttge etggatgtag taataaceta aetgatteet 37680 agttagaaag gacagcctta gtgactactg ctacccaaga cacagacctg tgctcctgag 37740 ggctgcccta tggatcaaag caagctaaat ggcggctgct atggctgccc agcaagtccc 37800 tattattatt atogagacag agtotogott agtoacccag gotggagtac agtggtgcaa 37920 teteggetea etgecacete tgeeteetgt gttegagega ttetgetgee teageeteee 37980 atgtagctgg gattacaggc gtgtaccacc ataaataccc tgctaatttt tgtattttta 38040 gtagagatgg ggtttcacta tattggcgag gctggtctgg gactcctggc ctcaagtgat 38100 ccgcccacct cagcctccca aagtgctggg attacaggcg tgagccacca tgcccagcct 38160 ggagtagttt tagataaccg catagctgtg cactgtttgc ttgctgaaca aggggagtgt 38220 gtggaatcgc cagctcgtct tgctgttccc acagtaatgc atcaactgaa gtggacatgt 38280 atgttgaaat gacaagacag caagcctcct ggtggcctag actgcttttc aggagtatgt 38340 ggggtttttt ggttgttgtt ttgttttgtt ttggcagggt ctcactctgc tgcccaggct 38400 ggagtagagt gacacaacct cagcttactg cagcctcgac ctcctgggtt caagcaatcc 38460 teceaectea geeteceaag tagetgggae tacaggeata tgeeaecatg eecagetaat 38520 ttttacattt tttggtagag acagtgtctt gccatgttgt ccaggctggt ctcaaagtcc 38580 tgggttccag caatcaaccc acctcggcct cctataaaga cgtgagccac tgcaggaggc 38640 tgaggcagga gaattgctga catatccagt ttcttagaaa aaaaacattt aatagagact 38700 tacaaacaga agctatgtct gggtctcagg tggcagtgag acaagatggt agctttaccc 38760 cccaagacca agggccacag gggaggggtg acctcaaagg gatgtgtagg acaattgaaa 38820 tatgataaca tcaaagttgt tttgtcctaa gggcaggatt tatgggaagt aggtgctccc 38880 gcactagaaa cacgacatga atgggaaatc tcagaggccc tccgagaact ggcattcatc 38940 aacctggtag atcaggcccc aagatggaat tgccttgaca cccacaccac ctgaaataat 39000 ctggagtact gttggcagct gatgtgagac tttggttctt gtcttcttag cttaaaataa 39060 tttaaacaag agacacaaca gcaaaggaga tgcagcatac aataattttt gcaaaagaaa 39120 aagaacatct tgaaagtgaa gtgcagaata ggcagagaga agaattcagg gcaggctgct 39180 cataaagatg agacagcaaa agttggcact agggaggctc cctttatgga aatcttacat 39240 gattattcat gaggggttgg gaagaggtgt tgctagtaag catgttctgg ccaaaagcta 39300 ttaaaagaaa aggagtgtca aaaaatttag gccgtgctgg gggtggaggc tcacacctgt 39360 aatcacagca ctttgggagg agaggcttaa gcccaggact tccagaccag cctgggcaac 39420 atggtgaaac cccatctcta ccaaaaatgc aaaaattaaa tgggcaaggt ggcacacacc 39480 tgtagtcccc actactcggg aggctgaggt ggaagaatct cttgggccca ggaggttaag 39540 gctgcagtga gccgtgattg ccccactgca ctccatcctg ggctacggag caagactctg 39600 tctcaaaaaa caaagtcaat ggttcccttt ggtggggaag gaagaagtgg ggtttgaatg 39660 gggggcaggg tacatatggg gagateetgg eegtagteaa tttettgate tgagtggtat 39720 tactttggcg ttcaattctg taactcttct ttaggccata tctttctgtt ttctgcagtt 39780 ttaatgtttg acatatctca aaaggaaaga aagaaaagga aggaacaagc ttgccatttg 39840 atccagatta gatgcaactg ttccagctgc gttttccatt ttcatctcag ccagtatttt 39900 tcaaaatgtg acatgcacgt atttccaaag ggcggtactg aaacaggata ggtaatcaag 39960 gaagtgaccg tgttcttggg atgcagcaag cgtggtgacc gcacagtcaa cacaataagc 40020

ctcagcattc gaattgtaat tgagctcatt caagcaaagc tatcttcagt ggggactttt 40080 ctttctagag agcatgcgca ttttgatttt acctatcctc aaactgaccc tttgctcatt 40140 ataatagtaa aaagcgcacc ccgggtggag atttaagaag ctaatgagac ctgcgacata 40200 cgagccagca tgtacagcta ctcacgcctg taatcccagc gctttgggag gccgaggtgg 40260 gcagatcact tgaggtcagg agttcgagac cagcctggcc gacattgtga aaacccatct 40320 ccgctaaaac tacaaaaatc agccaggcgc agtggcttac gcctgtaatc ccaacactgt 40380 ggaaggccaa ggcaggtgga tagcctgagg tcaggagttc gagaccagct tggccaacat 40440 ggtgaaaccc catctccgct aaaaatacaa aatgagtcag gtgtggtagc aggtgcctgt 40500 aatcccagct actcgggagg ctgaggtggg agaatccctt gaacctggga ggcggagcag 40560 tgagcagaga teteaceagt geacteeaae etgggegaea gagegagatt eegtetetaa 40620 aacaagtaaa taaacaaaaa taaaaaaata aaaatacaaa aactagctgg gcgtgctggc 40680 gggcgcctgt aatcccagct actcaagagg ctgaggcagg agaatcgctt gaacctggga 40740 ggtggaggtt gcagtgagct gagatggcgc cactgcactc cagcctgggg gacagagtgg 40800 gactccatct caaaaaaata aaaataaata aataaattaa ttaattaatt aataaaataa 40860 aatagaaaca gggtcttgct atgttgctca ctatgtggtg aattttttca ggtgctgagc 40920 aagactggag accagacaca caccaatgtc acttgcagta aacaaaggat atttgtccac 40980 atteaaagte tatggtgaca eeetggeeac atggggatge ttggeeacee tgeeteetae 41040 cttcatgcca gagtcgcctg tcataatgtc tggttacagc ccttcctctg aggtccaggg 41100 atttcaaagc agaagcagca ggtcttcccc ggctggagga agagccaaag cctccattcc 41160 tgggattett ggttgetgtt acctggggca aggggaggce caggetgtgg cgtgtattet 41220 cagaggattg gtcgtcttgg tccttctgtt tcctgggaag gaagggctgg tcctgtaggg 41280 ccccatctag atcccttagc accttctacc acctgatgcc cttggggata ccaagctctg 41340 tgcagtccag accatgttcc agctcagtgc ccaccttaca ggcatgcgcc accatgcctg 41400 gctaattttg tatttttag tagagatggg gattatccat gttggtaagg ctggtcttga 41460 actecegace teaggtgate eacetgtett ggeeteecaa agtggeeggg eagggetgaa 41520 ttcgccccct caccagctac tgccaaccac ggatgaatgg cttctgcctg cctcctgccc 41580 tccagatctt accagggcat ttcactggga aatatggcaa cagcccttgc cactcagggg 41640 acagcatggc aggggctggg aacgaatgtt gttgccaaac gacaagaccc agctgggccc 41700 agtggctcac acttgtgatc ccagtggtct gagaggctga ggcaggagga tcacttgaag 41760 ccaggagttt gagagcagcc tgggcaacac agtgagactc tacaaaacaa aacaaaaaaa 41820 attagccagg catggtggct ggtgccaata agcccagcta ctgggggaggc tgaggctaag 41880 gctgaggcag tgagccatga tcatgccacc gcagtccagc ctggtgacaa atgagaccct 41940 gcctcaaaaa aaaaaaaaa aaaaaaaaag aggaaggtga gcgcagtggc tcatgtctgt 42000 aaatccagac actttgggag gctgaggtgg aggttcgaga ccagcctggg caacatagca 42060 aaaccatgtc tttacacaaa ataaaaaatg agtcaggtgt ggtggcacat gccattggtg 42120 ccagctacgt gagaggctga ggtgggaaga ttgcttgagc ctgggaggtc cgaagctgca 42180 gggagccgta actcaggcat cacactccaa cctggctgac agaatgggac cctgtctcca 42240 aaaccaaaag attccagctc gaaaaataat tgtggggtgg cggcaaaagc tcctgactgg 42300 ccttgacttt agagtgaatc aatgaattaa ttaagggcct gcctgttagt gagtctcctc 42360 tgaaatttag cccagaaatt tcctaactca gcaagatgaa gcaggaggta gaaggaacta 42420 agggggcaat aagcaggagg aaggaatgte eccatgaggg tgacatette eetgagagee 42480 ctgaggggag gcccgtgggg gtggtgggga gtggtgcggg gaaggcagag gctgagcagc 42600 aggtgaggtc ccctgggttt tgggggccaa gcctggggct cggggcgagc aagcatgagt 42660 ggagaagggg ctgctgtggt tgggctgggg tggactcccc acctgcgtcg tccaaacatt 42720 agtgcgagtg cacccacaca aacacataca caatcacaca caacatgtga gcaatgggca 42780 ggactggtcc ggccccactc agtgctgtca ccattggccc cacagctgcc cacagcccta 42840 gagetetggg eccagattee tgeeageece acetgteeag geeaaggtaa gatgatggag 42900 caagggggtg ccagggcagc aaagcccccc acgtgcccct ttcccacagg gcccaggctc 42960 ctggcatcag gaggctgaac ccaggccctg gcccagactg tgtgcttcca gcctccctc 43020 ctctcgacac cagaacacag cctggcccca gcttctggga aatatagaaa aaaatgggtg 43080 aatgatccag tgacagggtg tcttgttcca cacaagacac agtgagcagg ggttggggga 43140 ggggctcctg gctgcgggag gcacaccaca ctcacccaaa tggcatctgt actcaatacc 43200 gcaccettee etgggggaca cetggteeca acetgagetg cettteteag gaccecagee 43260 ccagcccggc ccagcccagc cacaccctgc cactcccttc agccagtgtg gcttcaggtc 43320 aagaggctgg gcagggtcaa ggtggcaacg aggggagaag ccgggacaca gttctccctg 43380 atttaaaccc gggcagcctg gagtgcagct catactccat gcccagaatt cctgcctcgc 43440 cactgtcctg ctgcctcca gacatgctgg ggccctgcat gctgctgctg ctgctgctgc 43500 tgggcctgag gctacagctc tccctgggca tcatcccagg taatgaggct ccccgagctg 43560 cccctacaca acacacaca agggcacccc ccagcccagg ctgacctgat ctttgctctc 43620 cccctggcca gttgaggagg agaacccgga cttctggaac cgcgaggcag ccgaggccct 43680 gggtgccgcc aagaagctgc agcctgcaca gacagccgcc aagaacctca tcatcttcct 43740 gggcgatggt gagtgagcca ggccttccag ccctgcagcc ctcacagccc cggcgcccgg 43800

acceteagtg gttecaggag agecetgggg eccaageete acacatttet gtteetteag 43860 ggatggggt gtctacggtg acagctgcca ggatcctaaa agggcagaag aaggacaaac 43920 tggggcetga gatacccctg gccatggacc gcttcccata tgtggctctg tccaaggtaa 43980 gtgctgggct accttagagt cctccaagca cagaagggga atcctggcta tggagtgtgg 44040 taggagggag ggaccctaaa cagctggggc tccagtaagg agttagaggc agttggaatc 44100 ccagaggaca gagatcaggg tctgggtctc cgtgtctgcc ccagagaaga gctcagagtg 44160 tctctgtccc cagacataca atgtagacaa acatgtgcca gacagtggag ccacagccac 44220 ggcctacctg tgcggggtca agggcaactt ccagaccatt ggcttgagtg cagccgcccg 44280 ctttaaccag tgcaacacga cacgeggcaa cgaggtcatc tccgtgatga atcgggccaa 44340 gaaagcaggt gagctggggc ccgctgctgg gtcacggcca ggtcacagac gttggtcaca 44400 tatactgacc tctgacaccc ttagggaagt cagtgggagt ggtaaccacc acacgagtgc 44460 agcaegecte geeageegge acetaegeee acaeggtgaa eegeaactgg tacteggaeg 44520 ccgacgtgcc tgcctcggcc cgccaggagg ggtgccagga catcgctacg cagctcatct 44580 ccaacatgga cattgacgtg cgaccccag gccaagggct ggggctgggc agagagtagc 44640 agggagggg cactagctca gacccaggca accaaaagcc ttatctgggc cagcagggtc 44700 tggaggtggg gttgtgggcg tagaaggtgc agcccaggct gggccattcc cacagccttg 44760 gggaggggag tcaggggctg tgcatgagga gggggcacgg ggccagccag ggccccaaat 44820 ccacctgccc catcctctgt tcccaggtga tcctaggtgg aggccgaaag tacatgtttc 44880 ccatgggaac cccagaccct gagtacccag atgactacag ccaaggtggg accaggctgg 44940 acgggaagaa tctggtgcag gaatggctgg cgaagcgcca ggtgatgggg gctggcgggt 45000 gcagggggca cagcaggggg agggcagagg tgtggggctc agggctgtgg gctgaggcct 45060 ggctctctcc ctccccacag ggtgcccggt atgtgtggaa ccgcactgag ctcatgcagg 45120 cttccctgga cccgtctgtg acccatctca tgggtaatga cccccttcct gccctggcat 45180 ccctcagatg gcctcagatg gcaccttctg agcctgtgtg cacatccgcc agcacccgcc 45240 cacccccagc ctgccagtca ccacaggacc ccttgtccca caggtctctt tgagcctgga 45300 gacatgaaat acgagatcca ccgagactcc acactggacc cctccctgat ggagatgaca 45360 gaggetgeec tgegeetget gageaggaac eeeegegget tetteetett egtggagggt 45420 gcgtggtggc ccctggggag tgggggttgg gggttggagc agggcaggct cagcatetec 45480 cccctctggc cttcctgcag gtggtcgcat cgaccatggt catcatgaaa gcagggctta 45540 ccgggcactg actgagacga tcatgttcga cgacgccatt gagagggcgg gccagctcac 45600 cagegaggag gacacgetga geetegteac tgeegaceac teccaegtet teteettegg 45660 aggetacece etgegaggga getecatett eggtaggeet ggggagagtg geaggtgetg 45720 ctgcagcaat taagtgggtg aaatctgagc ctcagtctcc tcctctgtca aatgggagta 45780 atgctggcac cagccctgta gggtctcctg aggactaagc ccctgaccag gcaaaacgtg 45840 gcggtgccta gcacgtggga gacactccac agctgtgttc agctcaacca cagggacccc 45900 tetetetgea gggetggeee etggeaagge eegggaeagg aaggeetaea eggteeteet 45960 atacggaaac ggtccaggct atgtgctcaa ggacggcgc cggccggatg ttaccgagag 46020 cgagagcggt gagtgccgcg gggtggcccc ctgaggggga ccagggtgcc aaggatgggg 46080 ggctggcggg aaggggtcac ctcctgtctg cctggaactg aatgaaccct cctaccggaa 46140 ctgaaccctc caaccaggga gccccgagta tcggcagcag tcagcagtgc ccctggacga 46200 agagacccac gcaggcgagg acgtggcggt gttcgcgcgc ggcccgcagg cgcacctggt 46260 tcacggcgtg caggagcaga cettcatage gcacgtcatg gcettcgccg cetgcetgga 46320 geectacace geetgegace tggegeece egeeggeace acegaegeeg egeaceeggg 46380 gcggtccgtg gtccccgcgt tgcttcctct gctggccggg accctgctgc tgctggagac 46440 ggccactgct ccctgagtgt cccgtccctg gggctcctgc ttccccatcc cggagttctc 46500 etgetececa ceteetgteg teetgeetgg cetecageee gagtegteat eeceggagte 46560 cctatacaga ggtcctgcca tggaacettc ccctccccgt gcgctctggg gactgagccc 46620 atgacaccaa acctgcccct tggctgctct cggactccct accccaaccc cagggactgc 46680 aggttgtgcc ctgtggctgc ctgcacccca ggaaaggagg gggctcaggc catccagcca 46740 ccacctacag cccagtgggt accaggcagg ctcccttcct ggggaaaaga agcacccaga 46800 ccccgcgccc cgctgatctt tgcttcagtc cttgaatcac ctgtgggact tgaggactcg 46860 ggatcttcag gacgcctgga gaagggtggt ttcctgccac cctgctggcc aaggaggctc 46920 ctggggtggg gatcaccagg gggattttga cacagccttc ggctgccccc cactaagcta 46980 attccacacc cctgtacccc cccagggggc cctctgcctc atggcaaagg cttgccccaa 47040 atctcaactt ctcagacgtt ccataccccc acatgccaat ttcagcaccc aactgagatc 47100 cgaggagctc ctggggaagcc ctgggtgcag gacactggtc gagagccaaa ggtcctccc 47160 cagacatctg gacactgggc atagatttct caagaaggaa gactcccctg cctccccagg 47220 gcctctgctc tcctgggaga caaagcaata ataaaaggaa gtgtttgtaa tcccagcact 47280 ttgggaggcc gaggtgggcg gatcacgagg tcaggagatg gagaccatcc tggctaacac 47340 ggtgaaaccc cttatctatg cgcctgtagt cccagctacc caggaggctg aagcaggata 47400 atcgcttgaa cccgggcggc ggagattgca gtgagccgag gtcatgccac tgcactgcag 47460 cctgggcgac agagcgagat tctgcctcaa aaataaacaa ataaatttta aaaataaata 47520 aataataaaa ggaagtgtta gacaatgtaa tgccagtact acttcctagg aggaaaatca 47580

```
tgagtgcctg tgggcacagt gtctggaggg gtggataacg caggccagga ggggctgctg 47640
aggagcagat gattgagcag gagacctaaa cagagtgggg cttgagcaag gcagaacagc 47700
agtgccaagg ccctggggca gcgccagcag gtgctctggg aggccaaggg ctggatcaga 47760
gggtgggtgg gtagaggggt aaatctgagg gtcaagaggg tgggtagtgt tggggagtgt 47820
gaagtetgag tagagggatg tggttggagg tetttaagga gtgetgtgae eegeeetggg 47880
tggaaaataa gtattctggc tgctgccaga agaagggtct tgtcttttgg gtggatggtg 47940
ggggtggtag agggtagcag ggagaggtga gaactgggga aggaactgac tccaggtgtt 48000
tetgatetee gteegaaage attegggage acceatecea acacageeat gettggtgag 48060
taccacacct gccccaaaag aacattgaaa agaatttttt ttatttgagg cagagcctca 48120
ctctgttgcc caggctggag tgcaatgacc ttgtcttggc tcactgcaac ctctgcctcc 48180
caggttcaag ccattateet geeteaceet eecaagtage caggggteaa caagtgtgea 48240
ccaccatgcc tggctagttt ttgtattttt agtagagacg gggtttcacc atattggcca 48300
ggcaggtctc caactcctga cctcaggtga tccacccgcc ttggcctccc aaagtttggg 48360
attacaggtg tgagccacgt gtctggccga aaagaattaa aggtgaaatc agccacattt 48420
tccagcaaag tttacactat tacaaaaaat acaaaaatta gccaagcctc gtggcccatg 48480
cctgtggtcc cagctactca ggaggctgtg gtgggaggat cacctgaagt gaggagtttg 48540
agaccagccc agccaacatg gtgaaactaa aactggtcta aactaaaaca cggtctctac 48600
taaaactaca aaaattagcc gggcgtggtg gtcggcacct gtaatcccag ctacttggga 48660
ggctgaggca ggagaattga ttgaacctgg gaggttgcag tgaattgaga tcataccact 48720
gcactccagc ctgtgcgaca gagccactct gtcttaagaa aaaaaaaaa gcaagcattt 48780
tgtgctcact agaaatatta gcatgattga atgcttcctt gcatatgaaa attattttaa 48840
cattgtaaaa catctatttg gcaggcatgg cggctcaaca cctgcaatca cagcactttg 48900
gcaggaagag cgggtaggat cgcttgagtt caggagtttg agaatagcct gggcaacata 48960
gtgagatccc gtctctgcaa aaacaacaac tgagtccagg gaggtcgagg ctgcagtgaa 49020
agaagattgc tccactgcac tctagcctgg gcaacagagc aagaccctgt ctggaaaaat 49080
atatacatgt atttgaggac ctggctctct caggacagtt ttttttcttt tctaattcta 49140
ggttttagtg gctgtcataa aaatatggga ggtgaacaga aggtagacac cattagctgg 49200
ccttactaaa tcatcatact cattgttaca ttccatccac caaatatgca aaggttttgg 49260
taaaatccag ctagtgtatt tctatcttcc cagttgtcag tgggttagaa agttcctctt 49320
tctaaccaat gtggaggtgc tgcatgttta ggttttacat gagtgctcac acccaaggac 49380
ttctatattt taaaagtgaa gacattttaa aaacagatta ttctggccag gagttgtggc 49440
tcatgcttgt aatcccagcc ttttgggagg ccgagacagg cagatcactt gaggtcagaa 49500
gtttgagacc agcctggcca tcatggtgaa atcctgtctc tactaaaaat acaaaaatta 49560
gccaggtgtg gtggcaggca ctcgtaatcc tagctactca ggaggctgag acaagagaat 49620
cgcttgaatc cgggaggcag aggttgcagt gagccgagat cgcaccattg cactccagcc 49680
tgggtgacga gagtgaaact ccatcccaag aagaagaaga agaaggaaga agaagaagga 49740
49999
aaaagaagaa gaagaagag
```

```
<210> 18
<211> 49999
<212> DNA
<213> Homo sapiens
```

<400> 18

caacgcaaaa taagcttcta tccttcttcc ctggtcatag atgcttcggg tggcagcaca 900 gagccattta cagaagccta gcaatcagat acaaaaaaga atatagcggc catcacccta 960 gcaatcagat acaaaaaaga atatagcggc catcacccaa atgcgtatgt ttaacccaga 1020 caaccaagta ttcgggttca gtcattgaaa gccttcttgt aattgctgaa gggtatttgt 1080 ttgtaattgc tgcgagacca ttcttcaagt tgtttcttca actagacctc aaatgctttg 1140 tacataagct tgaatatatt geegegeace ecacegete eccactgeet geeagaggge 1200 tgggaaatgg ctgcaccgct gaacaccgca gttaccccgg ggaaattact tatgacctcc 1260 tecegegege tgecactgtg egeteeetee ceteceetge ttteeettee teteeteteg 1320 cgcaccctcc tcccgccctc agggacccct gggcaaggcc actgcgcccc gggtctacgg 1380 cagctggcgg ggcgctcaac gcgcgcactc acacggacga cgtagcgcaa agagttcctg 1440 tegtecagge tgaccataag egagaagage geggeggege tgtacaegee etgeaetttt 1500 caggtcccag cccccgcagt cctcgatgac ctccagcatg agcagcgggt tcagtcgttc 1620 gatctcgcgc atctcgaggc acaagcggaa gaaggagcgc acctagtgct gggcagcgcc 1680 gccgggtcca cccttgggcc gagccagcag gcgccgcagg cgctcctcgt tctgctagcc 1740 gccgccgcag gcgaacgagt ataagtcctg gcatgggtcg atgctggcgt ccaggttggc 1860 ggccaagaag cgagcggtgc acgcgaagtc ttgcgctcag gacagccttc aggacaggct 1920 ccgccgccgg ccgcgaccgg gcccaggtac ttgagcacca gcatagccgc caggatggag 1980 cagaggeegg etgeaaacac cageeegaca geaggtteaa ettgegeege tteeagaget 2040 gcagcceggc ctgggccegg tggcctgegg gcagaaagtc cccgcaagcg ccccccgcgc 2100 cgcagtgact cacatacttg acctectgga acteategta gtgcgccate agcgaatace 2160 aggactecat ggegeegagg cegeeggggt geageeetgg gecacetggg etaegggatg 2220 cgcgtggccg ccggcctcct cgtgagcctc cgcgtggccc ctgggggcctc agctgcggga 2280 aggacagagg caggctaatg agacgccgca gcccgacggg gttccggggc accgcgagga 2340 gagacacagg cctgggtgca gaggccccag ccgcgagcct cattcactgg ggaaaccagg 2400 gaccaggagg geteggeggg gecaccacce eegegtgeac agtggagtet teteceetgt 2460 ccccctccct gcacacacgt gcgggtccct gggttgggag ggccctgatg ggaaggggga 2520 qqaqccaqqc acqqgqcctg gcacqtaqtg ggccttcatt gaaaggctgt ccctcttccc 2580 ttcgcctttc tggtccagga cctgccccag ccaaggccgg gcagaatggg ggtgggggt 2640 ggagaagcgg aggctggagt gaggaggtgg ggtcaggagc gcgtctatgc tgcactttcc 2700 gettteegeg etggaeaeag acagaggete cacaaagegg ceaaagaaee aaaetttgte 2760 cttgcggaag tccgcaggat ctaccactca accccgatcg ctggctcctt ctactcggtg 2820 gcccgacage ccacccgete ettecccagg ggcgagegee aacgccccag ggtegtggat 2880 acacageeca ecceetggae ggeeetgatg gagacegget eegteecece acceaceece 2940 atteccagte tgtgacceeg accegageea etcceggett caatacgtte tecceagaac 3000 ccaaacttgg gtgaagtttc acctcccgcg gggcgcaagg agacgaagcc gggaggctcc 3060 gcgcagcggc cgcgatggcg gcaacggctg cagggattcg gcgccattta ccccgcaggt 3120 gcgcactcga gcaggaccag gactagcggg cccgctcgaa accagagcct gagcctgagc 3180 agaactgcgt gggcagccgc tgtctcccag cgcccgctgc cttttctgcc gccgagctgc 3240 cagcccgagg ggtccagccg tgtcccagga ccagtaaggg cagcgggtac tcccgggagg 3300 ggtcccttcg gatcccgcgt ccccattacg agctgcccac cagccggcta gaaaggggct 3360 ggagctacge agctgggggc cgtcatgccc cagcccacag ccctggagca ccggccgggg 3420 aggactecte ctaaaggata agggggeeet gatggagtge etgggetgee egeacagege 3480 ctgcgcacct tcaccgggga gcttccttgt actcctggga acgcctgtcc aggatgaggt 3540 ctccccaggg cgtctgggct tctggttggc ctcgctcact tcccccagtt cctgatccag 3600 ggagagcaac ggagagccct gccagaagaa ggcttggggc tgcgagtgcg gcccccatgg 3660 taccaatgca cagttgaccc agagcacagc aatcgcggcc aataggaggt gacttgggtt 3720 tagcctgtga ccacacagtc ctggtcaccc tgcacagact gccaataaag aggggtccga 3780 ggcccagctc cttggctccc ctgcagtgtc tccaaaaggg aagctgaggc tgtgggtgag 3840 tgggtgatgc cagtggtcca ggctccagtt ccaccttgca caaaggcctt cttaaccttt 3900 catcgaaaaa tatttctgca aggacatctg cccagcaacc acccgtccat cctcagactg 3960 gtgccacgca tatccttgat ccttgtagcc aaggataaat atctcaaaac aatcctgtga 4020 tectecteca tttteettta aaaacetttg tetteettea eeteeetaaa tteacaegtg 4080 ctttcctatg gcctgcttat tcccaagcaa tacctatttc caaagaaagt tcattttatt 4140 ttagagtett tetgtatttg ttatgeagtg teacatageg gageeagaag tgggaeegaa 4200 gtgaattcat cttggatgaa tcagcgtgtc ctggaatcta acgcagtgtt gactgagccc 4260 cccgcagact gcctttccag gagttgcttt tctgttctgg tgaatctcct caaataccca 4320 gattccctcc ctttggtcag ttccttttta ctttatcctg gatgtgattt gattataagg 4380 ctcccttaaa caaaggacct tgcatccctc ctgagggtat aaaggttggg tttctttctt 4440 tetttttttt gettetttge ttttggeaag caetttetgg tgtaaagage agtgeeette 4560 tggtttgagg actctgagtt ctaaagaatt tatgttctgt ccatgaggca agtctttcct 4620

ggtgaattca cttttggttc tggatgcctg actgaatatt atgtttgatg tgtacacctt 4680 taaatgattt ggctcatttt tttttcttgc ttgttcctga acatcttctg atcatcccac 4800 agcaaaaata aacataaata gtttagcacc ataggaaatg ttaaaacaca cgtacacacg 4860 gtgagggtcg gcccctcgag gtggctcctg tctgtaatcc ctgcactctg ggaggccaag 4920 gtgagagaat ggcttgagct aaggagttgg agaccagcct gggcaacatg atgaaacccc 4980 acctctacaa ataacacaaa aattagctgg gtgtggcagc tcccacctgt agtcccagct 5040 atcaggaggc tgatgtggga ggattgcttg agcccaggag gtcgaggcta ccatgacttg 5100 tggtcctgcc actgcactaa agcctgttta acagtgagaa ttgtctcaaa aaatacacat 5160 atggtgagtg tgagaaagcc aactgaaaga acccagggtg tcaccaccat ctaaaacact 5220 ggtccagact cctgacagtc cctgacaggg tttataggat tttctttgct tctcagagat 5280 gaaaaagaaa tggaatggca ttctcagaca ctaaggcgtg ccagattttc tgggactcca 5340 ggcagctaca tggctttccc tgtgcacatt tcaaaatcaa tggccatcat tggaatcatt 5400 tgaactcctc aaatttgctt tttcctaata ctgaattttt aaactgccaa ctacaaagtt 5460 aaatggagag cettetaagt tgtetaette tgtetetete ttttetgeet aettggaate 5520 tgctgacatt tctgctggca ttaagataaa ctgataatat cacactccag ccaacataaa 5580 aaccactaag gaaggggtct tgaagggctt tcaaattaat ggctctataa attacaacag 5640 ctccgtggca aacaacaacc tagagacctt ttggaaatgt aaattcaggt ttgcctaaca 5700 gttgcttcgg gtgatggaac agtccacgga aggattgata ttagaaaaga acagaatgag 5760 agaaatgttt ataaatgtta ggcacccaga ttaaacaggt caaaatcatg agctcagagc 5820 aataatgaaa aggatototg tttotggcat aaaaactgot tototgotac acaggggcca 5880 ggaagagctg aacgaactgc taaaatgctt cccaccggca cggagctgtc aagcaactga 5940 gagtggcaaa cagaagagaa atttgttatt ggacttttca aaactgctag gagattttgt 6000 ttcttgtaca aaatccagcc agtcctagct aaaattaaac agttagtatt taatccctaa 6060 tctcatttga aactgaaaaa ggataaaggt gggctcaaag agattaaaat aaaaaccaga 6120 aaactaaact gcttgccagg cgcggtggct gatgcctgta accccagcac tttgggaggc 6180 caaggcacgt ggatcacttg gcatcaagag ttccagacca gcctgaccaa tatggtgaaa 6240 ccctgtctct actgaaaata caaaattagc caggtgtggt ggcgcacgcc tgtaatccca 6300 gctacttgag agactgaggc aggagaattg cttgaatctg gaggctgagg ttgcagtgag 6360 ccgagatcga gccattgcac tccagcctgg acaacaagag cgaaactcca tctcaaaaaa 6420 agaaaagaaa agaaaactgt tttacccaaa gttttggttg ctgccctcat aagattgctt 6480 atcaagacaa atgacaattt tttttttttt tttgagatgg agtttctctg ttgtcgccca 6540 ggctggaatg cagtggagtg atctcacctc actgcaactt ccgccttctg ggttcaagtg 6600 attetectge eteggeetee caagtageta ggattacagg tgeacaceae cacaceegge 6660 tactttttgt atttttagta gagacagggt ttcaacatca tgaccaggct tgtctccaac 6720 ttctgacctc aggtgatatg cccgcctcgg cctcccatag tgctgggatt ataggcatga 6780 gccacggggc ctggccctga aaatcttaaa gtttagcttt gggacctctc ccattttctc 6840 agaaatctca tttggatcca actgtgtttt ataaacctgt gagtccacat tacaatgttt 6900 tgctgtctca tgactacaat tctaaaatga aagctataag gtcttatttg tgtttctgtc 6960 tatgtatgta tgtttttgca tgtcgtatgt cgtgtctcca agttgaaatc tggcatggtc 7020 agctagacat cccttaagaa attctatttg gggtggctgg acatggtggc tcatgcctgt 7080 aattccagca ctttgggagg ctgaggcagg tggatcagct gaggtgagga gttcgagaca 7140 agcctgggcc acatggcaaa accccatttt tactaaaaaa aaaaaaaaa aaattagctg 7200 gggctggtgg tgtgcacctg tattcctagc tacacaggag gctgaggcag gagaatcact 7260 tgaaccagcg ggggcagagg ctgcagtgag ctgagatcat gccactgcac tccagcctgg 7320 gtgacagagc gagactctgt cttaaaaaaa caaaaaaaga aaaaaaagat aaattaaact 7380 tgttaaaata tatagtgagc agggcatggt ggagcatgcc tgtattccca gctactcagg 7440 gggctgaggc aggaggatta cttgagacta ggagttcgag gccagcctga gcaacacagc 7500 aataccccat ctctaaaaaa aatatgtatg taggccgggt gcggtgtcaa acgtctttag 7560 tcccaccact ttgcgaggtc aaggtgggta gattgcttga gctcaggagt cccagaccag 7620 cctgatcaac atggcaaaac cccatctcta caaaaaaaa aaatacaaa aattagctgg 7680 gcttggtggc gtgtgcctgt agtcccagct agtggggagg ctgaggcagg agaatcactt 7740 taattcgaga aatagaggct gcagtgggct gtgattgcac cactgcgctc cagcctgggt 7800 gacagogaga coctatotoa aatatatata taatatata atataaaaca tatataatat 7860 atattacata tattatatat acacacacag atatatacac acacatatct atgtatgtat 7920 atgcatacat gtatacacac atacatatat aaatacatgt atacatatat aacataaaaa 7980 tgaacccaaa taccttttag ttcacatgat ctaactatat ctttgataaa taggctagtt 8040 ttaaatgtgt tgataaaata aaaataaaat atatttagca ccttcttttc tttctttctt 8100 tetttgttte tttttttt ttttaggeag agtettgete tgtcacecag getggagtge 8160 agtggtgcag tctcggctca ctgcaacctc cacctcctag gttcaaggaa ttttcatgcc 8220 teageeteet gaatagatgg taetaeagge aegeeteece acceegget aattgttttg 8280 tatttttaat agagaatggg cettgeeatg taggeeagge tggtetegaa eteetggeet 8340 taagegatee accegeeteg geeteecaga gtgetgggat tacaggegtg agceacegtg 8400

catgtccatc tttagcgttt gcagtgtaca ttttccactg ggtttgcggg tcagatggga 8460 tcatatgtgt ctctgctaga tgcctcaagg ttataaaacc ttaaacccaa cctaaaaaca 8520 aagtgatctt tgtttgtgga gttctttgat aaataaaact aatttagtat tgctacttta 8580 atgaaaatag ctctgtctta caagttactg gcaaaatatc tatttattta attttaagat 8640 tcttaggtga acatctgaga gtcacaggct acaaaagttg tgaacaggaa aaaaacctga 8700 aatgacgact agctttgtgt aatatctcag tattcaaaaat taatggggat atagttgtta 8760 aaaatataaa ttaggtaact gtaaatggca taaatgtcta taaataagct tttcatagaa 8820 tttgagattt ttttgtttgc ttgcttgttg tttgtttttt ggcagattct ctcactgtgg 8880 cccaagatgg agtgcagtag tgcgatatcg gctcaccgca acctcagtgc gagtgattct 8940 cttgactcag cctgccaagt agctgggact acaggcatgt gccaccatgc acagctaatt 9000 ttagggtttc accatgttga ccaggctggt ctcgaactcc tggtctcaag aaatcctccc 9060 ctcttggcca cccaaagtgc tgggattaca ggtgtgagcc accgcgtcca gtcggaattt 9120 gaaatctttt ttttttttga gatggagttt ctctcttgtt gcccaggctg gagtgcaatg 9180 gcatgatctt ggctcaccag aacctcggcc tcctgagttc aagggatttt cctgcctcag 9240 cctcccaagt tgggattaca ggcatgcacc accaagccca gataattttt gtatttttag 9300 tagagatggg gtttctccac cttggtcagg ctggtctcga actcccgacc tcagttgatc 9360 ggcccgcctc ggcctcctaa agtgttggaa ttacaggcaa gagccactac acccagccag 9420 aatatgaaat cttaaagtca ggttatgtta cattaagtga cagatactca ttaaatatag 9480 gggtcatttc caaataagac acaaaaacat aaattgccga acataaatat aagtgtgttt 9540 gtggcttctt aaaatctgat agaactacca aatatattgg ggttgtactg atacacataa 9600 aacagtgatg tttctaaaat tataaacggt tttcatctgt aaaatactga tatgtgacgg 9660 tcagttggcc aacatggcga aaccctgtct ctactaaaaa tacaaaaact agctgggtgt 9720 tgtggcgggt gcccataatc ccagctactg gggaagctga ggcaggagaa tcactagaac 9780 ccgagaggtg gagattgcag tgagctgaga gcatgccatt gcactccagc ctgggtgaca 9840 agagcaaaac tccatctcaa aaaaaaaaag aaaaaaatac ttttttcttt tgctagctgg 9900 tttttcacta gaaattaagg ttgctaagag ttaaaaattc taattaatct atacaattcc 9960 gtggaccaag tgtaccaaaa aaaagatgca tttttgacaa gaaaaattat ttaaaatgtg 10020 taaaagcatg tttttgcttt atttggtatt gttgtatatt taaaattatt tgaacttttt 10080 ataaattaaq aaaaatagag ataggagtot gotatgotgo coagcotggt otogaattoo 10140 taggttccag tgatccttct gccacagcct cccaaactgt tcagattgca ggtgtgggcc 10200 actgcacctg gccaaaatgt gttattcacg gaaataaagg aataattttg tctaatttgg 10260 agattatata atgttgtctc aaaatatgga tgtatgaact aaataaaaac aagacagaaa 10320 ggaaccagta agtaggagag agatgtgaag aatgttacag gtatgaagat atatttttgg 10380 taaaaacagt taaaaaaaaa aagaattcgg aatgacaaag gatcttgtgt ggtaaatttt 10440 ctgtcctaaa taaaacaact tattaattaa gaaaggggaa gtttaggtca aagcagaggt 10500 ctaagcatgt catggaattg ctaagtcatg aaaggtttgt gaaggatgaa tttgtgaaag 10560 aaatttttgt atgtgatcag gttggctaaa attagaagga aattatttat gagtctaagg 10620 attgagettt catattaaaa etacaetgag getgggeaca gtggeteate eetgtaatee 10680 caggactttg ggaggccaag gtgggtggat cacttgaagt caagagttgg agaccagcct 10740 ggccgacatg gtgaaacccc atctctacta aaaatacaaa agtttgccgg gcatgacggg 10800 acatgtetga aateecaget getetggagg etgaggeagg agaategett gaatttgaat 10860 ctgggaggca gaggtttcag tgacccaaga ttgtgccact gtactccagc ctgggcaaca 10920 gagtgagact ccatctcaaa aaaaaaaaac ctacactgat attgtcctct tatggctcta 10980 tctgattaaa aaaccaaaaa tttgcggccg cgtgtggtgg ttcatgccta taatcatagc 11100 attttgggag gctgaggcgg gcagatacct tgaggtcagg agttcgagac tagcctgctc 11160 aacatgggga agcctcgtct ccacgaaaaa tacaaaaatt agctgggtgt gttggcgggt 11220 ggctgtaatc ccagctagct gggaggctga ggcaggagaa ttgcttgaac gtgggaggcg 11280 gaagttgcag tgagcagaga tgacgccact gcactccagc ctgggtgaca gagtgagggt 11340 ctttctcaaa aaagaaaaaa aaaaaaaata cctaaaaaatt tggtcccctg tgttagtaca 11400 acaaagtttt cttgaagtat agatcagctc ttagaaaatc taaaagagtt attaattttt 11460 acagggtctc gctctgtcat ccaggttaca gtgcagtggt gtggtcttgg ctcattgcca 11580 ccttgaccaa cagggctcaa gggattctcc tgcctctgcc tcctgagtag ttaggactac 11640 cacctactgt gctaactttt ttgtgtgtgc caccacaact ggctttttta tttttgtata 11700 gacaaggtct atgaaaattc catcattgca tcattggata aaactcttag aaatctaata 11760 tttcactggg gatttcactc cacgattaca ttgtatgtca cagaaataac caaacttcct 11820 tgtcaattac taattacaat aaactatcat cagatttttt ttttttaaat ataagtagag 11880 actotottto tgtcacccag gotggagtgo agtggcacaa toatagotca oggcagtott 11940 gaatteetgg gtteaagtga tgetteegee teageeteee gattaaetgg gaetttaagt 12000 tttatttatt ttgagatgga gtctcgctct gtcgcccagg ctagagtgca gtggggcatc 12120 teggeteact gecagetetg ceteeegggt teaegecatt eteetgeete agteteetga 12180

gtagctggga ctacaggcgc ccaccaccac gcatggctaa gtttttgtat tttttttagt 12240 agagacggga tttcaccgtg ttagccagga tggtctcagt ctcctgacct cctgatcctc 12300 cctcctcggc ctcccaaagt gctgggatta caggcgtgag ccaccgcacc cggccatgtt 12360 tttatttttt atgcagatga gatcttgeta tgttgeccag getggtetge attteetggt 12420 ctgaagctgt cctcccaaag ttctttccaa agttctagga ttgcaggtgt gaacctccat 12480 gtcaggtctg aacttcaatc atatttttaa gaatggctat tcaaagtctc tgtcatccac 12540 agtgttgtcc ttccctaaaa acgtttccaa tcagattcat ggtaaagaca ttaccaagta 12600 ctcttaggac aagtttctga taactttaag atcaaaggac taggcttgct ccgtggctca 12660 cgcctgtaat cccaacactt tgggaggccg aggcgtgtgg atcacttgag gtcttgaggt 12720 ccggagttca agaccagcct ggccaacatg gtgaaacccc gtctctccaa aaaaaaaaa 12780 aaaaaaaaa aaaagactta gctgggcatg gtggcaggtg cctgtaacca cccagctatt 12840 caggaggctg aggcaggaga atcgcttgaa cctggaaggc agaggttgca gtgagccgag 12900 atcacgccac tgcactccag cctgggtgat acagcgagac tcagtctcac aaaaaaaaa 12960 aaaaaaaatc aaaggactaa ataaaatttt tttcagaaca caagtgaaaa aacatgaatt 13020 tgtgaaacaa ctaatcaaga tcagacagaa caaaaattaa cgacatgaag ttaagtaacc 13080 agtgaaaatc tgtgctttaa acagaaagct taaacagtgc ttaaatcagt gtttaaaaca 13140 gagagctatg acctaaagaa taattacaga attgaacact gaagaaacca ccacccggat 13200 caagaaatgg actatgacca ggatctcccc accccaccc ataccttccc tgttcataat 13260 tcccattcct ttgtcaccaa aggaaactga gttgttgggt ttgtttgttg gtttttgttt 13320 gtttatttac agacagagtc ttgttctccc acccaggctg gagtgcggtg gcagcattgt 13380 aattcaccgc agcctcacac tctggctcaa gtgagcctcc caactcagcc tcgcaagtag 13440 ctgggagtac aggcatgtgc caccacacaa agctaatgtt taaatttttt ctagagatag 13500 aateteeeta tgttgateag getggttgea aaeeeetggg eteaageaat etttettaee 13560 ttggcctccc aaagtgctga gcttacaggt atgagtcact gcacctggtc tccctgaatt 13620 tcaactttat atacataaaa gatatgttgg atcctatgta ttcttttgtg atttgcatct 13740 tttgtccagc tttatgtctg tgagattcat ttaatctgtt gcatattaca actggttatt 13800 tccattgctg tatacgattc caatcatgaa acaattgact ttttatcttc tctctttttg 13860 tettttttgag acagagtete eetetgtege eeaggetgga gtgeagtgge acgatetega 13920 ctcactgcaa cctctgcctc tcaggttcaa gagattctcc tgcctcagcc tcctgagtag 13980 ctgggattac aggtgtgcac caccacacct agctaatttt tatattttta gtagtgatgg 14040 ggtttcacca tgttggtcag gctggtctcg aactcctgac ctcatgatct gcccgcctcg 14100 gcctcccaaa gtgctgggat tacaggcatg agccaccgtg ccctgcgaca ttttatcttt 14160 tctgttgtca atcaacattt ggggctgttt ccatgtctgg ctatttaaac aatgccactt 14220 tgtacacgtt tggtgctttc ctcctggaca tgtgccaagt ttctccagga cacctaccca 14280 ggacagaatt gctgtctcgt gggatgtgca cagctcaaca ttcagaacgc tgctcctatt 14340 ggttcctcca cttcctgcca gctccccagg gatggacttt taaatcttgg ccagtctggg 14400 atctgggaca ccaccccacc cagtgtggtc tcttctacat tggtagacac cttttcacac 14460 acgtttattg atatttette tttttetgtt tttettttte tteetgagae agggtatece 14520 tatgtcacct gggctgcaat acagtggctc aaacatggct cactgcagcc tcaatctcct 14580 gggctcaagt gattctccca cctcaccctc cagaatagcc aagacgaaag gtgtgcacca 14640 ccacacctga gtaattttt aatttttgt aaagacaggg tctctccatg ttgcccagcc 14700 tggcctcaaa ggatcctcca gcctcatcct ccccaagtgc taggattaca ggcctgagtt 14760 aggaaaccag ggcgaattgt agcgaggatt gcttaaggtc atcataagaa gagcattgaa 14820 agaaacttcc cactacacag ctatcagaac ggctgaaata caaaatatga caacaccaga 14880 tgctggcaag tatgctgaaa aagtcactca gcttgctggt ggacacgtaa tggtacagcc 14940 aatctgcaaa acgagctggt aatttctcca aaaactacac atgcaaccaa catacagccc 15000 tggccattta tccaagacaa atgaaaacac atgttcactc aaaaacctac ccatgaatgc 15060 tcatagcagc tttatttata aaagccaaaa ctgaaagctg ctcaagcttc cttcagcagg 15120 tggttggtta aacacactgt ggtgcttcca tcccgtgaaa tagtgctcag cactacggag 15180 gagccagctg ctggcacacg cttggatgaa gctccaggaa gttatgttaa gtgaaaaaaa 15240 acgcccttcc caagagatca cacattgttt gtttgcattg atgtaactta gttgaaatga 15300 caaaatatta gagacacagg atgcatagca gattgccagg gattagggac aggggaagag 15360 gtggaggaaa gaggtgacct ggttataaaa gtgaccctgt ggggttggag ctcttcagta 15420 tctcaactat ggtgccgtta cacacaaacc tacttgggtg ataaaattgt atacacactc 15480 ccacacatat gcacacgagt acaggtaaca ctggggaaat ctgaataata actggggatt 15540 acgtcattga gggaaactaa gcaaagtgca caaggcattt gtccttcctt ccttccttcc 15600 agagccatgc tetgtagece aggetggagt geagtggeat gatategget caetgeaace 15720 tetgeeteee gagtteaagt gatttteetg etteageete etgagtageg gggaattaea 15780 ggcttgtgcc accacacccg cctaattttt gtatttttag tagagacagg gtttcaccat 15840 gttggtcagg ctggtctcag actcctgacc tcgcaatcca cccgcctcgt cccaatgtgc 15900 taggattaca ggtatgagcc accacgcttg gccaaggcca ttcttttatt atttttcttc 15960

ctttcttttt cctttttttg agatgttttc tcactcagtc acccaggttg gagcgcggtg 16020 gtgcaatctc ggttcactgc aacctctgca gcccaggctt aaaccaacct tccacctctg 16080 cctcaggagt agctggtacc acaggcacac gccacaatgc ctggctaatt ctttgtattt 16140 ttttatataa ttgggattct gccatattgc ccaggctggt cttgaactcc tgagctcagg 16200 tgatccaccc accteggeet cecaaagtge tgeggttaca ggettgagee acegtgeaca 16260 gcctgcttgt attattcctt actattacgt gtgaatctac agtttgtcaa aaattccaaa 16320 aggaaactcg ggccaggcag ggtggctcag gcctgtgatc tcagcacttt gggaggccga 16380 ggtgggcaga tcacgacatc gggagtttga gaccagcctg gccaacattg tgaaaccccg 16440 tttctactaa aaatacaaaa attagccagg catggtggtg cccgcctgta atcccagcta 16500 ctcaggaggc tgaggcagga gaatcatttg aacccaagag ccggaggttg cagtgagctg 16560 agateatgee actgeactee egeetgggea actgagegag acteagtgte aaaaaaacaa 16620 aaacaaaaac aaatacgaaa ctcggctggg tgcggtggcc attgtctgta atcccatcca 16680 tttgggaggc tgaggcgggc agatcacatg aggccaggag tttgagacca gcctggccag 16740 catggtaaaa ccccatctct actaaaaata caaaaattag ccgggcatgg tggcgggaac 16800 ctgtaatccc agctacttgg gaggctgagg cgggagactc acttggacct gggaggtgga 16860 gattgcagtg agccaagatt gtgccactgc actccagcct tggcaacaga gtgagactcc 16920 atctaaaaca aagtaaataa aaatttaaaa aatttaaaag aaattagccg ggcgtggtgg 16980 tgcacacctg taaccccacc tactcgggag gctgaggtgg gaaaatcatt tgaacctggg 17040 aggeagagtg tgcggaagat ggcgccactg cactccagcc agggcgagag agtgagacac 17100 ggatggctgg gaaagctcct gactggcttt gcctttggag tgaatcaatc aatcaattaa 17220 gggcgtgcct gttagtgagt ctcctctgac ctttagccaa gaatgttccg aactcagcaa 17280 gatgaagcag gaggtagagg gaactaaggg ggcaacaagc aggagacagg aagggcccat 17340 gagggtgaca tetteeetga gaggteeagg acaaccagea ggaagteagg egggtgeagg 17400 caggaggacc caggaaagct cggcctgagg gaggccctag gtgtggtggg gagtggggta 17460 gggcaggcag aggctgggca gcaggtgagg tcccctggat tctgggggcc aagcctgggg 17520 cttgaggtaa acaggcctga gtggagaagg ggctgctgtg gttgggctgg ggtgggtgga 17580 gctggaggag ccttttcttc ttggaccaaa ttttgaattg tgctacataa catggtacat 17640 cagagttacc tccttcacca ttttcaagtg ttcagtacac acacattgtt gtgcagctga 17700 tttccagaac gttctcatcc tgcaaccctg aagttctgtc cctattaaac tccaactcta 17760 accetaacce quaccetace etaaccetaa tecattgece cetececcag teccaggtaa 17820 cctccattcc acttctgtct ctatgaattt gactcctcta gggacctcag agaagtgtgt 17880 tcatatgcat ttgccctttt tgttattgtt tttaagaatc ttattttaca ggagacggta 17940 tttgtccttt tgtgactttc atatttcact aggtgtaatg tcctaaccgt ccattcacgt 18000 tgtaacagag tettetecag ggeeteette aaggetgeat gatatttegt tgggtggatg 18060 accccatttg gtttcttcta ccttttgggt atatatatat atgcacatat ataacccagg 18120 ctggcctgga actcatgagc tcaaacaatt ctctgacttg gactcccaaa gactgggatt 18180 acaggtgtga accaccacgc ccagccatcc ttttggttat tctggttttc aaattttttc 18240 ccaattttat taagactgtg ataaaccage caggcatggt ggctcatggc tgtaatccca 18300 gcactttggg aggccaaggc gggcagatgc cttgaggtca ggagttcaag accagcctgg 18360 tcaacatgat gaaaccctgt ctctattaaa aatacaaaaa attagctggg tgtggtggct 18420 tgcacctgta gtcccagcta cttgggaggc tgaggcagga gcatcacttg aacctgggag 18480 gcagaggttg cagtgagccg agatcacacc actgcactcc agcttgggtg acagagtgaa 18540 acactgaaaa aatgtctttc gaaaatgaaa aaaaaaaaat actgttataa acccttggat 18600 tgaaaaagtt tataatgata acttctacag tgtaaaaaat aaaaaagtaa aaagagttaa 18660 aaaataaaaa taaataaata aaattatcaa tgaaccctaa tcagaataaa tataaagttg 18720 aaaaacacac taaacaaatc actatattat tcaggaaaac atgcatatgt ggtaaaaagc 18780 aatcaacagc aaagtcaaga ttaaccaaaa tacaggatag tcattacctc tggggagaaa 18840 ggtgggagac tcaaaggctt taaatctttt tctcaaaaag atttatccct acagagtaaa 18900 taagggttta tttttgttat tcatctttaa atggaacaga tggaaaacat ttttttgcat 18960 gaccacaaca aatggaaaat atattaatga agttcagtca ctcttctgtt ttactcataa 19020 taacagaagc cagaaacctg ggagttacct ttgaccactc cctcaccaac caagtccaat 19080 taattttcac ttctaatcac acctataata ccagcacttc gagtggcgga ggcgggcaga 19140 tcacttgaga ccaggagttt gagaccagcc tggccttgat ggtgaaaccc catctctact 19200 aaaaatacaa aaattagccg ggcatagtgg ctcatgcctg taatcccagc tactcaagag 19260 gctcaggcag aactgcttga atcccggaag cggaagttgc tgtgagccgg gatcacacca 19320 cactttctat tcttccccac ccacaacacc aaaccctggc cccagccact ttgattctca 19440 ccaggaaccc aaatccctcc ctcttcctta acacccccgc tctaatccaa tctccacaca 19500 gcagccaaag ccaacacttt aaacatgatt aactctgtct gtcttcaact tgaatctccc 19560 tcactaccct cettttctat cagaagcaac agagagacaa gtaaattgcc caaggccaca 19620 cagcaggaca tggcagagac aggattcaga atctactagt tttgacagtc cacatgtctc 19680 acccacccac tatcccattt tgggtgatcc cagaaaaggg tcagccactg ccctaacaca 19740 gggtaatctc agacaaggac agaggatttc tcctccaatc accacttccc ttcctttatc 19800 agoctaacto coagttatoo otaattotoa gotoaaacoa cacttootot attitittit 19860 tttttttttt tttgagacag agtcttgctc tgttggccaa gctggagtgc agtggcgcga 19920 tettggetca etgeaagete caceteeggg tteacaceat teteetgeet cageeteeeg 19980 agtagetggg accaeaggtg cetgeeacca egeceggeta attttttgta tttttagtag 20040 agacagggtt tcaccgtgtt agccaggatg gtctcgatct cctgaccttg tgatccaccc 20100 gcctcggcct cccaaagtgc tgggattaca ggcgtgaacc actgtgcccg gccttcaaac 20160 cacattttct aggaaaggcc ttcctaggcc ccttgtccta ttccagcaac tccccacaat 20220 ttgatggcca gcactttgta catctctaaa aacattcctc ttccactaga ttgtgccctc 20280 cacaagggca gaggtetgtt ttgcccacga ttgtggcaca tgtcacacac ccttgagcac 20340 tetggtteet etecaaatee attteteetg aatgtgggee eagattggtg geteaagtet 20400 ggaaccctag cagtgttgaa ggatcgcctg agcccaggag tgcaagacca gcacgggtaa 20460 cagaaagaga teetgaetet acacaaattt ttgaaaaatta getteacata atggaagata 20520 cacgggaggc tgatgtggga ggatcgcttg agcctaggag gtgtggcgtg aatgcaccac 20580 tgcactccaa cttgggtgac agagccagcc cctgtctcaa aaaaataaat aaataataat 20640 aataaaacag aaagaaaaaa atgatggcaa ggtatctgaa ctgcagaaat actttttaac 20700 tcagcctgag gctatcaaaa catctgatcc ccatgtgaaa ggctacagtt ctgggcatgc 20760 tcagggccca ccgaaaacag agtccgccca ggcaccctct gcctgtgcaa gggaacaggt 20820 gtcacaatca agtgcacaag ctgctctgga agacccagcc caggcctgtc tggccgaggg 20880 cactggactc tececeactg egtegteeaa acattagtge gagtgeacce acacaaacac 20940 tgtcaccatt ggccccacag atgcccacag ccctggagct ctgggcctag attcctgcca 21060 gccccacctg tccaggccaa ggccagatgt tggagcaagg gggtgccaga gcggcaaagc 21120 cccccatgtg cccctttccc accgggccca ggctcctggc atcagaaagc tgaacccagt 21180 atctggcccg ggctgtgtgc ttccagcctc ccctcctctc gacaccagaa cagagcctgg 21240 cccccagctc ccaggaaata cagaaaaaaa aaatggtgga tgaacgagtg acagggtgtc 21300 ttgttccaca caagacacag tgagcagggg ttgggggggg ggcccctggc ggcaggatgc 21360 acactgcact atacccaaaa tcccaccctt ccctggggga cacctggtcc caccctaagc 21420 tgcctttctc aggaccccag ccccagccca gcccagccac accctgccac tcccttcagc 21480 cagtgtggct tcaggtcaag aggctgggcg gggtcaaggt ggtaacaagg ggaggggcca 21540 ggacacagtt ttccctgatt taaacccagg cagcctggag tgcagctcat actccatacc 21600 tgggatttcc gcctcgccgc tctccgactg cttccagaca tgcaggggcc ctgggtgctg 21660 ctcctgctgg gcctgaggct acagctctcc ctgggcatca tcccaggtaa tgaggctccc 21720 ccagctgccc ctacacaca acacacaca acacagggca ccccccagcc caggctgacc 21780 tgatctttgc tctccccctg gccagttgag gaggagaacc cggacttctg gaaccgccag 21840 gcagccgagg ccctgggtgc cgccaagaag ctgcagcctg cacagacagc cgccaagaac 21900 ctcatcatct tcctgggtga cggtgagtga gccaggcctt ccagccccgc agccctcaca 21960 gccccggcgc ccggaccctc agtggttcca ggacagccct ggggagcaag cctcacacac 22020 ttctgctcct tcagggatgg gggtgtctac ggtgacagct gccaggatcc taaaagggca 22080 gaagaaggac aaactggggc ctgagacctt cctggccatg gaccgcttcc cgtacgtggc 22140 tctgtccaag gtaagtgctg ggctacctta gagtcctcca agcacagaag gggaatcctg 22200 gctatggagt gtggtaggag ggagggaccc taaacagctg gggctccaat aaggagctgg 22260 aggcagttgg aatcccagag gacagagatc agggtcttgt ttgtctgccc cagagaagag 22320 ctcagagtgt ctctgtcccc agacatacag tgtagacaag catgtgccag acagtggagc 22380 cacagocaçg gectaectgt geggggteaa gggeaactte cagaceattg gettgagtge 22440 ageegeeege tttaaceagt geaacaegae aegeggeaae gaggteatet eegtgatgaa 22500 tegggeeaag aaageaggtg agetggggee egetgtgggg teagggeeag gtgaeagaee 22560 tctatcgcat atcctgacct ctatcaccct caggaaagtc agtgggagtg gtaaccacca 22620 cacgggtgca gcatgcctcg ccagccggcg cctacgccca cacggtgaac cgcaactggt 22680 actoggatgo cgacgtgoot gootoggood gooaggagg gtgocaggac atogcoacgo 22740 ageteatete caacatggae attgatgtge gaceeeeggg ccaagggetg gggetgggea 22800 gagagtagca gggaggggc accagctcag acccaggcaa ccaaaagcct tatctgggcc 22860 agcagggtct ggaggtgggg ttgggggggt agaaggcgca gcccaggctg ggccattccc 22920 acagcettgg ggaggggagt caggggetgt gcatgaggag ggggcacggg gccagccagg 22980 cccccaaatc cacctgcccc atcctctgtt cccaggtgat cctaggtgga ggccgaaagt 23040 acatgtttcc catggggacc ccagaccctg agtacccaga tgactacagc caaggtggga 23100 ccaggctgga cgggaagaat ctggtgcagg aatggctggc gaagcgccag gtgatggggg 23160 ctggcgggtg cagggggcac agcaggggga gggcagaggt gtggggctcg gggctgtggg 23220 ctgaggcctg gctctctccc tccccacagg gtgcccggta cgtgtggaac cgcactgagc 23280 tcatgcaggc ttccctggac ccgtctgtga cccatctcat gggtaatgat ccccttcctg 23340 ccctggcatc cctcagatgg ccccagatgg caccttctga gcctgtgtgc acatccgcca 23400 gcacccgccc acccccagcc tgccagtcac cacaggaccc cttgtcccac aggtctcttt 23460 gageetggag acatgaaata egagateeae egagaeteea eaetggaeee eteeetgatg 23520

gagatgacag aggetgeect gegeetgetg ageaggaace eeegeggett etteetette 23580 gtggagggtg cgtggtggcc cctggggagt gggggttggg ggttggagca gggcaggctc 23640 agcatetece ecetetggee tteetgeagg tggtegeate gaccatggte atcatgaaag 23700 cagggettae egggeactga etgagaegat catgttegae gaegeeattg agagggeggg 23760 ccageteace agegaggagg acaegetgag cetegteact geegaceact eccaegtett 23820 ctccttcgga ggctaccccc tgcgagggag ctccatcttc ggtaggcctg gggagagtgg 23880 caggtgctgc tgcagcaatt aagtgggtga aatetgagcc tcagtctcct cctctgtcaa 23940 atgggagtaa tgctggcacc agccctgtag ggtctcctgc ggactaagcc cctgaccagg 24000 caaaacgtgg cggtgcctag cacgtgggag acactccaca gctgtgttca gctcaaccac 24060 agggacccct ctctctgcag ggctggcccc tggcaaggcc cgggacagga aggcctacac 24120 ggtcctccta tacggaaacg gtccaggcta tgtgctcaag gacggcgccc ggccggatgt 24180 taccgagagc gagagcggtg agtgccgcgg ggtggccccc tgagggggac cagggtgcca 24240 aggatggggg gctggcggga aggggtcacc tcttgtctgc ctggaactga aacttcctac 24300 tgaaactgaa ccctccaacc agggagcccc gagtatcggc agcagtcagc agtgcccctg 24360 gacggagaga cccacgcagg cgaggacgtg gcggtgttcg cgcgcggccc gcaggcgcac 24420 ctggttcacg gcgtgcagga gcagacette atagegcacg teatggeett cgccgcctgc 24480 etggageeet acacegeetg egacetggeg eecegegeeg geaceaeega egeegegeac 24540 eeggggeegt eegtggteee egegttgett eetetgetgg eagggaeett getgetgetg 24600 gggacggcca ctgctccctg agtgtcccgt ccctggggct cctgcttccc catcccggag 24660 ttcccctgct ccccacctcc agtcgtcctg ccggacctcc acctggaget gtcacccccg 24720 gagtegecae acagaegtee tgecatggaa eetteeeete eeggtgeaee etggggaeeg 24780 agecettqae accaegecet tigettiate tigetettga aattitiggee ceaactecag 24840 ggactgggga tttgtgcctg gcagctgcct gcatttcagg aaaagaggag gctcagacca 24900 tccagcccc gcccatatcc tgaggtggat caggcaggct ctctccccgg ggacatgagg 24960 cacccatacc taggaccccc tgcgcctttt ttagcttcag tcatggcagc acctgaggga 25020 cacaaggact tgggtgcatc aggacgcctt ggagaagcgt ggcttcctgc caccctgcaa 25080 cccacctcc cagccaagga ggctgctgtg gtggggatcc ccaggggggc tttgacacag 25140 tectetgetg tecetecaet gggetaatte tacacceetg tgeeceteet aggggeceat 25200 gagtcagaga ggcttgcccc aagtcacagc cactcagatg ttcgacgccc cctaaggtcc 25260 attecageae ceaectgagt teegaggage acetgggaag etetgggtge aggatageag 25320 tecagagtee atggeeege etaggeeate tgggtgetgg geatggattt eteageaagg 25380 aagactcatt accttccctc cctgggcctc cattcttctg ggaaacacaa agcaataata 25440 aaaggaagtg ttagacaatg taatgccagt actacttcct agcataaaaa tcatgactga 25500 atgtggacac agtggctgga ggggtggata acacaggcca ggaggggctg ctgaggagca 25560 gatgactgag caggagacct gaacagagtc ggggcttgag caaggtggca cagcagcaca 25620 aaggccctgg ggcagtgtca gcaggctgtc tgggaggcca ggggctggat cagagggtgg 25680 gtagatgggg taaagcttga ggggtcagga gggtggggga catgggggac cgtgaagtct 25740 aggtagaggg gtgtggtcgg aggtctttga ggagggctgt gacctgccct ggctgggaaa 25800 tgagcactct ggctgctgcc aggagaaggg tctggtcttt tggatagagg gtgggggtgg 25860 tggagggtag aggtgagagc tggggaagga gctgactcca ggtgtttctg acctccctcc 25920 gaaagcatte tggagcacce atcccaatae agccatactt agtatcacae ttgccccaag 25980 agaacattga aaagaattaa atgaaggtga aatcaaccac attttccagg aaagtttaca 26040 ttattacaga tttatttgta catttacaat ggtacaagga gcactttgtc aacatggtga 26100 aattctgtct ctacaaaaaa tacaaaaatt agccaagctt ggttgcccat gtctgtggtc 26160 ccagctactc aggaggctga ggtgggagga ttgtctgggg cctgggaggg tggaggctgc 26220 agtgaggtgc gatcacgtca ctacacttca gcctgggtga cagagcaagg ccctgtctca 26280 agaagaaaac aaaacaaaaa gactttgtac tcactagaaa tactagaatg attgaatact 26340 totttatgaa aattgaatta acattgtaag acgtotattt gocaggoatg gtggttcaat 26400 gcctgcaatc ccagcacttt gggaggaaaa gaggttagga ttgcttgagt tcaggagttg 26460 cagaccagcc tgggcaaatg gtgagacctc acctctacac gttttcgttt agtgttgagg 26520 cagagtetea etetgtetee caggetgaag tgeagtggea ggatetagge teaetgeaaa 26580 ctccacctcc tggattcaag tgaatctccc gccccagcct cccatgtagc tgggattaca 26640 ggcgcctgcc accatgccag gcaaattttt gaatttttag tagagatggg gtttcactat 26700 gttggccagg ctggtctcaa tcctgacctt aaacgatccg ctcgccttgg cctcagaaag 26760 tgctgagatt acaggcatga gccaccatgc ctagccccag atttttaaaa aatttagcca 26820 ggccaggtgg cacgtgcctg tcatcccaac tacttgggag gctgaggcgg gaggatcacc 26880 tgagcccagg gtagttgagg ctgcagtgag ctgagatttt gccactgcac tctagtctga 26940 acctgggttt caggacagtt ttttcaattc tgggtttcag tggctgtcac agaaatatgg 27060 gaggtgaaca gaagatagac tcaaatagct ggccttacta aattatcaca ctcattgtta 27120 aattccatcc atcaagtatg caaaggtttc tggtaaaatc cagctagtat atttctatct 27180 tcccagttgt cagtcagttc ctctttctaa ccaatgtgga ggtgctgcat gattatattt 27240 tacatgagtg ctcacaccca cggacttcta ttatttaaaa ctggacaaat tttaaaatag 27300

attgttctgc tattagatta ttctgttgtc taggtttttg ttttttgttt tatgtttttg 27360 ttttccatgt gtaggtataa gggcttatcg gtcagctatg ttattgacca caaaatcaag 27420 tgtcatgaaa atattttcaa acttctattc aaaaatatgc actttcctta gcatgagttt 27480 tcattgaaag ataattacct tctcattttg tcattgaaat gacatcttta cctgaaggac 27540 acacaggaag tatatttata ttttcaatct tttcatggta cgcctaaaat ggagagcttt 27600 gagggagaac tcaggacagg tgggttcagt actttgtcat tctgcgactc attctatgtg 27720 gccagaaagt ttccacccac tccccttacc aagtatctta aagtttctat ttatgtttaa 27780 gtttctatta tgcggctatc taaactttac aaaatcaacc ccactgcctt ctgcaacatc 27840 tcatgtacac gctgggcttc tttcctgcgc tgattagacg gggggtgagc caatgagtga 27900 ggggtaaggg tgaacctacc tctgcacact gatttgtatc cggaatgctt tttttgaaaa 27960 aaccetteet gagtagetat tecatetgtg gttgeattte caccatttee teataacatt 28020 gtttttattt aaaaaggcat ttgctgttgg caatatatct tgtctgctat atctaccttt 28080 tagtgggaca tgaaaaaaa tgaaagaagt ggtttgtgta tttccctatt ggaacagcac 28140 ctggcaaata ccttcagctg agccatgttg ggaacatctg tgctttcagc tcattgcaaa 28200 gcaaacctcc cacactgggt actttgctct aacacgagtt tcttccaatc ttcggcagtg 28260 ttttctccac atcttccgac ggtgtttgct gacaaagaag tctttcggtt tgtcgacaga 28320 tcatttactg ctcattgttt ctgccatttt tcctgcaaca gaaagaatta agtttctccc 28380 tggtggtagg tgtttttagt ctcatggtat catgcaagaa actttaaaag agctttccaa 28440 atatctgtca ttgcgtatgg aaatatcaag aagtactggg ttgaactgca cctaaattta 28500 aacattgatg ggaaaaaatt gcactctttc ttcagttccg gaagcttagt ttggccaggc 28560 acagtggctc acgcctgtaa tcccagcact ttggaaggca gaggcaggtg gatcacctga 28620 ggtcaggagt tcaagaccag cctggccaac atggtgaaac cttgtctcta ctaaaaaata 28680 caaaattagc caggcatggt gatgcatgcc tgtagtccca gctacttagg aggctgagga 28740 gggagaatca cttgaaccca ggaggcggag gttgcagtga gctaagatct tgccactgca 28800 ctcaagcctg ggcgacagag cgacgttctg tctcagaaaa aacaaaaagc ttagttttag 28860 acaccttgcc aaccatgagg atttcacact gctcataagt aattaagtaa tacctccagg 28920 aacaaggcac ccggggcaaa cttcagcagt aatcagagtg ggggaaattc aaagagtttt 28980 gtttgctgat tttttattat taggggtaac gtctggtcag gtccgtaccc cgggtgacgt 29040 gcgctctgac aggagtaata aggaattctc agctccccct tctgctgtgg ttcatctgct 29100 ctggatttct gttgttagtt gcagattctt tacaggaatc ttgtgtgagc ctcttggccc 29160 ttttggagga ttaggtcggt taaaactaga tcatataagg ctgcgcgcag tggctcacgc 29220 ctgtaatccc agcactttgg gaggccgagg caggcagatc atgaggtcag gagatcaaga 29280 ccatcctggc taacacggtg aaacccccgt ctctactaaa aatacaaaaa aaaaaaaaa 29340 attagccagg tatggtggtg ggcgcctgta gtcccagcta ctcgggagac tgaggcagga 29400 gaatgacatg aaccegggag geggagettg cagtgageeg agategeace actgeactee 29460 atcatataat ctgtcaatct acttaggcag acacactaat actccacaat ttgctgaaag 29580 cttgtgatct ggagggcgta ctgtgtcaac ccctggcctg aggcacccaa ttcccttcct 29640 ccggggcacc cgggaaccac atggggtggg tgcctgcatg aagggtgaag gcaccagcat 29700 tcagctcaat attaaacatg agctcttggg tcgctcactg cccagggctg tgctgaggca 29760 tgtgatgagc ccaacaaaca gtaagcactc aggagggcct gatgttcctt taaccaaacc 29820 ccaaggtcca ggttagtctt gaggtgcttg cagcctgggc aggccattca aattgagcaa 29880 ctccttgtga gcaggggcgt ctcactccct gcaaaattca gaccccagat ggcacaagtt 29940 cagtccccac cagattcgag gccccctgcc cattgagtgc ccgtgagccc ctacacagtt 30000 ccagtgattg gcacaggaag cctcatgatc ggggaagagg agtatgctcc ctgcagcctc 30060 tcaggactca agggggatcc cagctgtgcc ctcctgctgg gtgctgatgt tgcatctgat 30120 gatgccctgg tcccactggt tctaggaaca ggcctcccca ccgggttagc atctgcataa 30180 atggcctttg cccccatccc aagggggtcc caagatgtct acagtgtgtg ggacttacta 30240 tgtgggactt gtaattgtac cctctgagct aaggtggccc caggacctac tgactccctc 30300 cgaccagagc ttcccccttt gctaccaggc cacacactgg accccaacac caagaagcag 30360 ctgaagttcc tcttgataga agcttgccac ctaggatgcc accgggcatg cattggccag 30420 agtatgttat gtcttgatca ctgaagtcag gtcatagagc ctggactgca ggacattctg 30480 tggttacact atagggaggg tgtggtcaag tgggagaccc acctatatat ggacccaata 30540 ggtatagata cacaccccaa acccatctgg ttcttgctgc gtagatagaa ggcaatgagc 30600 gcctgtcggg ggaacaacca cctctgtaga aaggtcacag agcccggact gcaggacatt 30660 cctggcagcc cagccacacc catctcctga caatgcatct tctgtgccac ctctgggctg 30720 ggccaccacc ttcccggcta ctgcctcatg accetectet gacaceccag ctctgggcca 30780 ggcacccaca tggacttgtc catctcctgc ccagtcttct tgactgagag ctggatgctg 30840 aagcagatgc tgttcaatat gttcttgtaa taggtcttcc catggacctt aaactatgag 30900 gggcatgggc agcactcagc cgcagaccag ggcaaggctg cagatagcgc cacaaccggg 30960 ccatgcaggc cacctgccct cccaggtgcc attagcagag aggctgtggt caggttgggc 31020 aggcagggac acagtcccac ctcatactcc ttgtccacag acccagtttg aaaaggaagt 31080 ctgggtagcc gaccatcacc accatgtact gaagttgcgg gccggagggc tggtgaggtg 31140 gcacagggcc tcagggcaca gcatcettge ccacecetg cecaceaagg aaaggagcac 31200 taggccagcc taggagtggg cttcacggtg ggggaggcag gcctgctcaa ctccacgaag 31260 tectetttgt ceettttatt etettteact ggeataeagt aggtgeteag teaatgtgea 31320 tgggaccaac agatggcact gggggcccct caccacggcc ccagtagctg ttctggtctc 31380 catgcagtcc agetectcca ggegetggee caggatgtae ttggtgtett ecaecagetg 31440 ccacacatgc agggtcaggg gtcagggagc aagggtcaac ccagcagcet ttcactctgg 31500 tccatcactc ctggcatgaa ggagtctttc agcaccactt cctaagccca gagctcggtg 31560 ctaggcgcca agaggacatg ttggaggtag ggatccagac ccttcccctc cgacaataag 31620 ctcacaggct agaagaggaa atggctgcag caaccaccat gggcatccct aaggagatgc 31680 ctcctgagca tggctgaaaa ggtgggcagg ggcctggcag ggagggccac ctaccgctga 31740 cagaccagga ggaggaggcc tgcggcatga tcatactgga gcctcagaat aggctgaggc 31800 ctaagcaggg cctggtcccc ctgcctgcag ggggacattt ggggctcccc atgcgaggac 31860 catggcctcg ggagggttca ccctcagttc agcaccatcc tccccaccct aaaccagggc 31920 agtggtggtt ggcctggccc aggctgaccc gggccagttc atgaagcttg ccgatgccct 32040 ccatatcaag tgccagctag tgcagcacct catggaatgg taagaacagg tgctcactca 32100 ggaccaccac cacgtcccac acgaggtagt tatgcaggac cctgggggcc agatgaagcc 32160 agtggggtgt ccagaaagac attcatatgg gccaccaagg gcaccacccc cgcctgtact 32220 acccaqcctq cqqctqqacc cagcactcag atagtccctc aaagaagggg caggaggtca 32280 tcccaggtat gtggaggctg aaattggagt gtgctgagct caatgacaca gcaggacact 32340 ctcqctactq atqccaqccc ctqaaqctqa tqqqtcaqqq cttctatcat ttcctgactt 32400 gccatgggga gacagcgtct gtccttgagg gtgactgtct gactcagagc tggcttgcaa 32460 aggeetetgt teeteeceat ggtggataga taccaegagg eteteecaag ggtggeecag 32520 ggacagcaga gctgtagcca cactttctct ttccaaccat ccctaggtga ggaaactgca 32580 geteaggaag eteceageee tgeegaggge eteggaaage agaggggaga getaggateg 32640 gatacccggg ctctgggtcc ttttttagtg ctgcctcctc tagtgtgact actggacaga 32700 agtaggggtg gaaattcatg gcacacccag ccagcaagtc cagggggcag gggaggggcc 32760 tgggccatac tcacatgggg gggggggtg atcttctgca gctgtcccac cgtcatcttt 32820 ctgtacatgg agctgacatc tcgctggaaa tcatcatact ctgacacagt gatctgggtg 32880 ggcgtagcaa tcagggctga gccagccttg ccccatggtc ccctgtcatc agctgccccc 32940 actacageca cagggtetee ttageettet getecacage ateageacee aggaggetga 33000 gcactcgctc catgaacacc ctgtgtgctg ccagtatctg caccacggga aggggctcat 33060 ccagggacag ggacaggcct agcctaggga cacccatcct ggggccccag gccttccctg 33120 cctccccatc ccatgtccca gcaccttctc actctcctca tcctgagcga ggtacagagt 33180 cctctctagc agattgagcc catcctggtc aatctaggga gggagacagg ggccagaggt 33240 cagagateca catgecagae tececaaaca gatggaattt teaceceaat geecagagag 33300 cgaccagaca tccatgggta gagacccaga agcacgcaga ccccagcccc tctttccacc 33360 cagacgagat gaccaaagcc ccatccctga ctgtctcagc ttacccctga aagcctgcac 33420 tttccctacc tgtcggggc acttgcgcag tgccgcactg acccttgggg ttcctggctt 33480 cctgccctca ctgccttcca gagggctggg aaattgcggc tcccgcggct cggctgaaca 33600 cttcagttaa cccagggaaa ttacttgcgc cttcctcccg cgctctgccg ccaagcgctc 33660 coetcootty otttocottt ototoottt gegeaccete etcocaegeg cagggacccc 33720 tagtcagggc cacgcccgg gtctgcggcc gctggctggg cgctcgggaa tcgcactcag 33780 gcggatgacg tagcgcgagg agttcctgta atctaggctg atctagagag agaagagcgc 33840 ggcggcactg tacacgccct gcaccttgta cagcagctgg ttgaggtccc agctggttga 33900 ggtcccgcga cccccggacg ctccgccgcg ccgcccaggt cccagccccc gcagtcctcc 33960 atgaceteta geatgggeeg aggacteagt agetetatet egegeatgte gaggeaegaa 34020 cggaaaaagg cgctcacctt gcactgggcc gcgccgccgg gcccatccct gggccgtgcc 34080 agcaggegee teaggegete etetttetge tegeegaagg eegegatggt geeataggtg 34140 agettttegt tgggggtgge atggegette agteageage egeagaegaa aaagtagaag 34200 ttctggtacg aagtccatgc tggcgtccag gttggctgcc aggaggccgg cggcgcgcc 34260 taaggeettg ceetegggge ageteteggg acaggegeeg eegeeegeeg egaeegggee 34320 ctggtacttg agegecagea tageegecag gatggegeag agateagegg egaacaceag 34380 ccccgaccgc aggctcacct cacgcagggt tccagcgcgg cagcccaggt cctggtggcg 34440 ctgctccttg agagaagcct gggcggcaga aaggcccttg cacgatcccc gcgccacagc 34500 agettaggta ettgacetee tggaaegegt egtagtgege egteagegaa tacegggete 34560 catggcaccg aggccgccgc gatgcagccc tgggccacct gggctatggg atgcgcgcgg 34620 ccgctggcct cctagtgggc ctctgcatgg ccccgggggg ccaaagctgc gggaagagca 34680 gagtcaggct caggaggcgc agcagcccga cggggctccc aggcaccgcg aggagagacg 34740 caggectggg tgcagaggec ccagetgeeg geeteattea etgeggaaac cagggaegag 34800 gagagtetgg eggggeeace ateceegegt geacagtgga gtettetece etgteeteet 34860

ecctgcacac acgtgtcgga tgctggattg ggaggcctct tatgggaagg gggaggcgct 34920 gggcacgggg cetggcacgt agggggcett cattgcatet etetteeett egeetttett 34980 gtccacqacc tgtcctagcc aaggccaagt ggggtggggg aaggagcaga ggctggagtg 35040 aggaggtgcg gtcaggggcg cgtctatgcg gcactttcag ctctccgagc tggacacaga 35100 cagacgette gcaaaacgge caaagaacca aactttgtee tegtggaagt etgegggate 35160 taccacttca aaccegeteg etggeteett etgeteggtg geeegaegge eeaccegeee 35220 cttcccaagg ggaacgcact attgctccag ggtcgcggat acacaaccca ccccctgcac 35280 ggcagtgatg gggaacccga gacctgtccg tctctatccc ctttccgctc cactcctggc 35340 ttcaacaggt tctccctaga acccacatt gcgcgaagtt tcacccacgc tggggcgcga 35400 gctggccggg cgagcccaga gccatgcagg cgcggcgcg agtccatgga gcctcagagc 35460 cgagcctggg agtcgcagcc ggcggatgga cgcaaacaaa gccgggaggc tccgcgcagc 35520 ggctacgaag gtgacggaag tggccgcggc tgcagggact caggcgccac ctacccggca 35580 ggtgcgcgcc ggagcctggc agaggcggag cgggtcgggc cgaagccgct gcctgagcag 35640 gagegaageg gegetagegg eeggtgtete eeegeteeeg etgeettete tgeegeegee 35700 ccagcccgcc gcccgcctgc ctgcctgccc gagggagagg acgcgccggt ggctccaccc 35760 tecteegeee gteeegeget ecetteette eteetgegae eetetggeta eetggeageg 35820 eggeggeage ggggaeetgg gtegggggee geggagaeag getteegagg gtegtgegeg 35880 ggctgcggta ggggactccg gatccagtgg catcccggga ctagtgaggg tagcgggtac 35940 acceggeagg agtecectee gatecegtgt ecceaetegg aacegeecae caaceggttg 36000 gaaaggaget ggagetaege agetggggge egteatggte cageceacag ceetggagea 36060 ccacccaggg aggactcctc ctaaggattg agagggcgct gacggagtgc ctgggctgcc 36120 cqcacaqcqc ctgcgcagaq ctcaccttca ccaqggagct tcctttacct cctcggaacc 36180 cctgtccggg atcagetete cccggggtgt ctgggettet ggttgteteg ecceetteee 36240 ccagcctctg atccacggag agcaacgcag agccctgcca gaagcaggcc tggggctgtg 36300 agtgtggccc ccatggtccc aataggcggt tgtcccagag aacagcaatc actgcctata 36360 ggaggtgacg tgggtttagc ctctgaccac acagtcctgg tcaccctgca cagactgtca 36420 ataaagaagg gtctgaggcc cagctccttg gctcctctgc agtttcccca aaagggaagc 36480 tgaggctgtg ggtgagtggg tgatgtccgc ggtccaggct ccagttccct cactgtgggg 36540 tetteeecta eccetgtgat atggtttgge tetgtattee cacceaaate teacetegaa 36600 ttgtaatccc cataatcccc acgtgtcaag ggcgagacca ggtggaggta attgaatcat 36660 ggggctggtt ccgcacgtgc tgttcttgcg cgaatgagtg agtctcgcca gatctgatgg 36720 ttttataagc gtctgacatt tcccgtttgc gcgcattctc tctcctgtcg ccatgcgaga 36780 aggtgctttc caccatgatt gtcagtttcc tgagggctcc ccagctatga ggaaatgtga 36840 gtcaattaaa cctcttttct ttataattta cccagtctca ggtatttctt cataggaggg 36900 tgagaacgga ctaatacacc ctgattgccc aggtgacccc atgactcata tgcaagagca 36960 tggcagacca cagcagtgcc cagcgacacc cagtgaagcc ctgagtgacg cagctggata 37020 cctgatgtga gggtgagcgg gtgggtagag tagccagagc tgccttggag agagaaggcc 37080 cgagggggtg ccgggcacag accaggcaca gaccgtgagg gcttcagaat ctgactcgct 37140 gectacecee tgaetaaega eagateeeag teateeagee tatgeaeete gteagaatea 37200 aaacagagtt ccttttgtta aaaatcctga gaagtaaagc caggaacatg aaggggattt 37260 atcatgcaca aaacctgata tcaagaacta tcacagaaga ctgcaaacaa ccagcttgca 37320 taatggcctt cacaaccttt caccaaaaa tacttctgca aggacatctg cccagcacct 37380 geetgteeat ceteaaactg gtgeeactea tateettgat cettgtagee aaggatgaat 37440 atctcaaaac aatcctgtga tcctcctcct tttttcttta aaaacctttg tcttccttca 37500 cctttctaaa ttcacacata gtttcctctg gcctgcttat tcccattgca gtacctattt 37560 ccaaagaaag ttcattttat tttagggtct tcctgtatct gttatgcaat gtcacatagt 37620 ggtatcagaa gtgggactga agtgaactca tcttggatga atcagtgtct cctggaatct 37680 aacactgcat tgactgagcc ctctgcagac tgcctttcca ggagttgctt ttctgttctt 37740 gtggggaaaa gaaagagaga tcagattgtt actgtgtctg cgtagaaaga agtagccata 37800 ggagactcca ttttgttctg tactaagaaa aattcttctg ccttgagatg ctgttaatct 37860 gtaaccctac ccccaaccct gtgctccctg aaacacgtgc tgtgtcaact cagggttaaa 37920 tggattaagg gctgtgcagg atgtgctttg ttaaacaaat gcttgaaggc agcatgcttg 37980 ttaagagtca tcaccactcc ctaatctcaa gccactccct aatctcaagt acccagagac 38040 acataactgc ggaagactgc agggaccact gcctaggaaa gccaggtatt gtccaaggtt 38100 tctccccatg tgatagtctg aaatatggcc tcatgggaag ggaaagacct gaccgtcccc 38160 cagcccgaca cctgtaaagg gtctgtgctg aggaggatta gtaaaagagg aaggaacgcc 38220 tetttgeagt tgaggtaaga ggaaggette tgteteetge ttgteeetgg gegatggaat 38280 gtctcagtgt aaagccgatt gtatatccat ctactgagat aggggaaaac cgccttaggg 38340 ctgtaggtgg gacatgctgg cagcaatact gctccttaag gcattgagat gtttatgtat 38400 atgcacaaca aaagcacagc acttaattct ttaccttgtt tatgatgcag agacctttgt 38460 tcacgtgttt acctgctgac cttctctcca ctattatcct atgaccctgc cacatccccc 38520 tctccaagaa acacccaata atgatcaata aatactaagg gaactcagag gccggtggga 38580 tectecatat getgaaegee ggtteeetgg geeeeetttt gtetttetet ataetttgtg 38640

tetetttett ttecaagtet etegtteeae etaacgagaa acacceaeag gtgtggaggg 38700 gcaacccccc ccttcatgtt ctggtgaatc tcctcgaata ctcagactcc ctccctttag 38760 tragttrett tttactttat cetggatetg ttttggttat aagesteest taaacaaagg 38820 gtgtgtgagg cagtcttgct cggtcaccca acagagtcct gctctgttgc ccaggctgga 38940 gtgcttggca ggatcacggc tcactgcaac ctcttcctcc caggttcaag cgattcttgt 39000 gcctcagcct ccctagtagc tgagactaca agcgtgcacc accatgtccg gctaattttt 39060 gtattctggt agagactgga ttgcaccacg ttggccaggc tgatcttgaa ctcttgacct 39120 caagtgatct gcccacctcg cctcccaaag tgatgggatt acatgggtga gccactgtgc 39180 ccagccagtt ttgtttttt atttgcttct ttgcttttag caagcacttt ctggtataaa 39240 cagaagtgcc cttctggttt gagggctctg gtttctacag aatttatttt ctgtctaggc 39300 ggcaagactt ttctggtgaa ttcacttttg tttctgcatg cctggctgaa tattttgttt 39360 ctgtaaatga tttggttcat tttttttcat gcttgtgaac atcttctgat catctgatag 39480 caaaaataaa cataaatgat ttggtaccat aggaaacatt taaaaaataaa taaataaata 39540 aatgtcgagt gcaggcctgg cacaatggct cccgcctata atcccagcac tttggaaggc 39600 caaggtggga ggatggcttg agctcaggag ttcaagacca gcctgggcaa cattacaaaa 39660 ccctgtctct acaaaaata caaagattag ccagtcatgt tggtccatgc ctgtaggccc 39720 agctactagg gaggccgagg tagggggcat tgcttgagct caggaggctg aggcataaga 39780 attgcttgaa tctgagaggt ggaggtcata ttgagctgtg atcgcaccac tgcactccag 39840 tgggtatgag atagccaatt aaaagaaact agggcatcac tacctctaaa tacttgtgca 39960 aactccagga tttataggat tttctttgct ctcgagatta ataagaaagg gaatggcatt 40020 ctcaaacatt aacagccagc tacatggctt ttcctcatgt acattttaaa atcagtggca 40080 cgataggaat catttgaact ccccaagttt gttttttcct tatactgaat tttaaaaattg 40140 ccaactacag agttaaatgg agagcettet aagtteteta ettetetet tetttttet 40200 gcctacttga aatctgctga catttctgct ggtattaaga taaacccaca atatcacatt 40260 ccagccaaga taaaaaccaa taaggaagag gtcttaaaag gttttcaaat taatggttct 40320 acaaattaca acageteeat ggeeaaceea caacetagae geettttgga aatgtaaatt 40380 taggtttacc tgtctaacag ttgctttggg tgatggacca gtccatggaa ggactgctat 40440 tagaaagaat agaacgagag aaatgtttat aaaaattagg ctctcagatc aaagaggtca 40500 aaattgtgag ctcagagcaa taataaaaag gatttctgcc cagcataaaa attgctttgt 40560 ctgctacaca gggccagaag aacttaaaaa aaaaaaacct gctaaaatgc ttccctacct 40620 gcgtggaact gtcaagcaaa taagagtggc aaacaaaagc aattagttat ggacttcaaa 40680 actgcttggt gattttcttt ctctaataaa atccaggcag tcctagttaa aatataaaca 40740 tttaatattt aacccctaaa ctcatttgaa actgaaaaag ggaaaaggta cgatcgaaga 40800 aataaaaatt aaagacaaac aaaaaagaaa accaaactgc tttacccaaa attttggttc 40860 acagecetea taagattget cataaagaca aatgeaaate ttaaagttta getttgagae 40920 ctctcccatt ttctcagaaa tctcatttgg atcctactgt gtcttataaa cctgtgagtc 40980 tgtattagta tgttttgctg tctcatgacc gaaacgctca aatgaaagcc ataaggtctt 41040 aaatctggca caataggcca gaaattcctt aaggaattat attcagttta acttagatta 41160 attaaacttg ttaaaatata tagtgagcag ggcatggtgg agcatgcctg tattcccagc 41220 tactcagggg gctaaggcag aaggattact tgagcccagg agttcaagga cagcctgagt 41280 gacatagcaa gaccccatct ctaaaaaaaa tatgtatata ggctgggtgc ggtgtcaaac 41340 atctttagtc ccaccacttg gggaggctga ggtcggtgga ctgcttgagc ccagtagctg 41400 gagttcgaga taagcctggg caacatggca aaaccccatc tctataaaaa aaatacaaga 41460 attagecagg catggtggtg tgtgcctgta gteecageta etagggagge tgaggeagga 41520 gaatcacttt aacttggaaa gtagaagctt ccatgggctg tgattgtacc actgcactcc 41580 tatatatata tatatatatg cacacacc tgtgtagata catacatata taaatacatg 41700 tatacatatt acatatacat acatatataa catagtaatg aacccaaata ccttttagtt 41760 aatagaaata totttagoat tttottttot ttottcattt ottocctoto tottoccoc 41880 tttttttttt tttttttt ttttctttt ctctctcaga gcctctctct atcacccagg 42060 ctggagtgca gtggtgcaat ctcggctcac tgcaacctcc acctcccagg ttcaggtggt 42120 teteatgeet caaceteetg agtagatggt actataggtg etcateacea etcetageta 42180 attttttttg tatttttagt aaagaatggg ttttgccatg ttggccaggc tggtctcaaa 42240 cttctggcct caagacaaaa aacattaaaa ttaaaattaa aattaaaatt aatttaatca 42300 aatgeetgge etcaagtgat ecaceegeet eggeeteeca gagtgetggg attacaggeg 42360 tgagecacca egeacgteca tetttageat ttgeagtgta eatttteece teggtttgtg 42420

ggtcagttag gatcatacgt gtctctgcta gatgcttcaa ggtcctaaaa ctgtatttta 42480 tttttttattt tttgtgagac ggagtctcac tctgtcgccc aggctggagt gcagtggtgt 42540 aatctcagct cactgcaacc tccacctcca gggttcaagt gattttcctg cctcagcgtc 42600 ctgagtagct gggattacag acatgtgcca tcatgccctg ctaatttttg catttttatt 42660 agcgacgggg tttcaccatg ttagccaggc cggtctcgaa ctcctgacct caagtgatct 42720 gcccacctcg gcctcccaaa gtgctcagat tacaggcgtg agccactgcg cctggcctaa 42780 ggtcatagaa aaactttaaa cccaacctaa aaacagtgat ctttgtttgt gtagttcttt 42840 gataaataaa actaatttag tattgctggt ttaatgtaaa cagctctgtc ttaggagtta 42900 ctggcaaaat atccatgtat ttaactttaa gcttcttaag tgaacacctg agagtcacag 42960 gctatgaaaa tagtgaacaa gaaaataccc ggaaatgagt actagctttg tgtaatatct 43020 cagtattcat aattagtgga ggtataattg ttaaaaatat aaattaggta aatgtaaata 43080 ggatgaatgt ctataaatga gcttttcata gaatttgaaa tctttttttc tttttttt 43140 agacagagtc tectetgteg eccaggetgg agtgeagtgg tgtgateteg geteactgca 43200 atctccacct cccgcgttca aatgattctc atgcctcagc ctcttgagta gctgggatta 43260 caggcatgcg ccaccacacg cagctacttt ttgtattatt ggtagagacg gggtttcacc 43320 atgttggcca ggctgctctc gaactcctgg tctcaagcag tcctccacct cagcctccca 43380 aagtgctggg attacaggca tgagccactg tgcctggcca gactttgaaa tcttaaagtc 43440 atgttatgct accttaactg acaaatactc attaaatata ttggtcattt ccaagtaaga 43500 gaaaacacaa aaacataaat tgctgaacac aaatatgttt gtttttggct tcttcttttt 43560 ttggctcact gcaagetetg ceteegggt tegegecatt eteetgeete agteteegga 43680 gtagctggga ctacaggtgc ccgtcaccac acccggctaa ttttttgtat ttttagtaga 43740 aacagggttt caccatgtta gtcaggatgg tctcaatctc ctgacctcgt gatccacctg 43800 cctcggcctc ccaaagtgct gggattacag gcgtgagcca ccattggctt cttcagtttt 43860 atggaactac caaatttata ggggttaata cacataaaaa ttatgcgatg gggaaacatg 43920 tttctaaaat tataaatggt tcccatctgt aaaatactaa tatgtgacag tcatttaaac 43980 attititigct tootaggitt toactacaaa tiaaggitigo taagaattaa aaattotaat 44040 taatttatac aattctgtag acaaagtgta cagaatatgt atgtttgatg agaaaaacta 44100 tttaaaatgt gtaaaaacat gtttttgttt tatttgagtt ttttgtatat ttaaaaatta 44160 ttttaacttt tttttaatta aaaaaaaaat agaaatagga tcctgctacg ctgcccagcc 44220 tggtctcgaa tttctaggct caagtggtca cctcccaaag tgttgagatt gcaggtgtga 44280 tccactccac ctggccaaaa tgtgttttca taaatccaaa atatggattt atgaaagaaa 44340 taaaaacagg atagaaagga acccgtaagt aggacagaaa tgtgaggaaa ggtatgaaga 44400 tatatttttg ataagtacag ttaaaagaaa aaagaataat ttggaatgag aaaggatctt 44460 gtaagttttt gtgtcctaaa gtaaaatgac ttgttagcta agaaagggga agtttaggtt 44520 aaagcagagg cctaagcatg tcatagaagt gctaagtcat gaaaggtgtg tgcggtgagc 44580 ccagatcgtg ccactgcact ccagcctggg caacagagag agactctgtc tcaaaaaaaa 44640 aaaaaaaaaa aaggaaatgc ttgaggtatt tctattttat caaccaattt aaaaccagct 44700 tatttatcag agatgtagtt aaatcacatg aactaaaagg tatttggttc attactatgt 44760 atatatgtat gtatatgtat aaaacagagc tgctttcaat aaaccagcaa tactcaacta 44820 gttttattta tcaaagaact acatgaacaa agattactgt ttttaggttg ggtttatagt 44880 tttatgacct tgaaacatct agcagagaca catataatgt cttcccattt ttttgggaag 44940 gatgaatttg ggaaaggaat ttttgtatgt gatcaagttg gctaaaatta gaaggaaatt 45000 attcacgagt ctttctaaag atggagcttt catattaaaa ctacactggt attctcatct 45060 gaaggctcta ggagaagtaa aaaacaaaca aaacaaacct acgctgattt aaaaactaaa 45120 aatttggtcc cctatgttag taccacaaga tatccttgaa atatagatct gcttttattt 45180 ttatttattt atttttgtaa tagagtettg etetgttgee eaggetggag tgeagtggeg 45240 caatctcagc tcactgcaaa ctctgcctcc cggttccagt gattctcctg cctcagcctc 45300 gggtagctgg gattacaggc acgtgccacc acacgcagct aatttttgtg ttttttggtgg 45360 agatggggta teaceatgtt ggeeaggetg gtetegaaet eetgagetea ggtgatetge 45420 ctgcctcagt ctcccacagt gctgggatta caggtaggag ccaccgcgcc cagtctaaat 45480 ctgcttttag taaatccaca agaagcatta atttttaatt ctgtgtttaa cagccatcta 45540 aactgaaget tteatttttt ttttttttt teetgagaea gggtettggt etgteateea 45600 ggcaagagtg gatccctcca aaattcagac actattcatg agtattctta tgacaacatg 45660 gttatttgaa gtttaagaat ttgctctctt tttatatagg atacaattgg aaacattggc 45720 tatattacca aagetttgat tgeaatatat ttgtgaatat geatagaatg eetggettet 45780 ggggttccca gccttacagt gagcaactaa aaattgtcac ttcctggcag gcccaggaaa 45840 cttcagactg cagaaaaaaa tctaaagtct gtcttggttt ggcttcctag cctcaagagg 45900 tttgataatc tgagattcct gttttgtttt gttttttttc agacaaggtc tgtaatccca 45960 aagtgetggg attacaggeg tgagecactg egeccageet tetgtggaat tettaaaaat 46020 gggacccgcc tttgggaggc caaggtgggt ggatcacctg cggtcaggag atcgagacca 46080 gcctggctaa cacagtgaaa ccccgtctct actaaaaata caaaaaatta gccgggcgtg 46140 gtggcgggcg cttgtaatcc cagctactcg ggaggctgag aaaggagaat tgcttgaacc 46200 caggaggcag aggttgcagt gagccgagat cgtgccactg ccctccagcc tgggcaacaa 46260 agagtgaaac acggtctcaa aaaaaaataa aaggggaccc gctttgttcc taaagagagg 46320 aaccccacag gacagggcta ggagacagtg acatggacag ggactgcagg atcaaggctc 46380 atggagtgtt tggggccact gggacacctg ggaacagggc cccatggagg ccagtggaat 46440 cccagagcag ggagtgagtc ctctccccca acacctgctg agtgaccctg ctggagccct 46500 tettgtetet gggeeteagt titeteatet gtaacatggg aataataaca ggaeeaacea 46560 acctettagg getgttgeag ggtttgtata aggecatget gtgaaaatee caagtggeag 46620 caagtctggc acagagcagg gcctcagccc ccgcccctg tgcatacaca caaacagatg 46680 catatacaca tgcacacaca catgcataca cacacgtgca tgcacacatg cacacagata 46740 tgcacacatg cacacagata tgcacaca catgcatata catgtgtata cacacatgtg 46800 cacacccaaa acacacaggg ctcgctcctc aaggggacct cactgtgcct cagtttgccc 46860 atctgtaaag ggggtgatta tagcccctac tgcatgacgc tgctgtggag ctccgtgagt 46920 cagtacctgg aggatgccta ggactgggct gaacttagcc tgtacagccc cacagggagc 46980 tgagtggaga aggtgggctt gggtgttggg agcagagggg gcagcatggg aatccagggg 47040 ttcttaaagg tctaggtgcc tgtcacccat gaggaggccc caaggggtcc ctgaagaaca 47100 gaggeacega tetecteetg eeeggtaagg gageaggget gaggeeagga acaggeeagt 47160 gagageetge acaageeggg gageetteag tgtgacagee aaggaeeage agagegeeag 47220 cctgctaagg accccgggcc gcactcaggc ctgggcgagg gactgacctg gggacttctt 47280 gaggtttctc cgactgtatg gagctcacca gggaaaacat ggcggatgcc tggattcatt 47340 gcccagctcc gagctcagca caaaaactcc ctcttggaac agtctagaaa gaggctcacc 47400 tgaggcccag cacccagggg ccatgatgtc acgtgggcca aggcatctga ggggcagggg 47460 cettecceat cecaetgetg ceatggeeg tggeecacta tgecetgeec teetgaecca 47520 ggagcccagt gcgtctctgt ggggtgggag gagcgtcagc aaaggagagg ctgcacaggg 47580 cgccttcagc agtgacggga aaccaagagc aggaaaagca accctgctca gccctgggcg 47640 actcagacag gaaagggcct gagcccgagg caaccaggag gcggcagcct tatcagggag 47700 gccgtgctgc gggcctgagt gctgcttctg ccctcatcca actgcagcgg gacagaggca 47760 caggeggtgg ctgcaggggc ccatgcgtgt gegcctgtgc ctgtgaccag cctcagggcc 47880 taggggcagg gagcagacca ggggaaaggc tctgtccctg gggggtggcc gggcaggtgg 47940 agagecaggt teagatgggt gaccetggge tetgeagetg etgtgateet ggeagagggg 48000 aggaggcqcc ctcggcagtc aggagcagga tgatggtagt gacaaggccc tgctgtggac 48060 tqaqcctccc aqcctaqqaa acctqqctct gqcctcccct gcagcatgtg atgtttggct 48120 ccagaggeet teteetetgg gettttecat geetgtgaac tgggeeecat teattteeet 48180 gtggtttcat ggaaacgtcc agtgcattca ggaggttgca gtgtgcccag gaggagaggg 48240 qtcaqcqaqa qqcccqagct qtgactggtg ggccacccag aggccacggc accctctgct 48300 ggagactggc agcagggtgc atggccagct gtgggtgggg gtccatcagt caagcagctg 48360 cactttetee ceateceet cecegacea ggeaaggtge tetgeetgeg getecettte 48420 tecaggeete caetttecag eteccagget eccageecea eccggeetgg eetggaacag 48480 ggctgccacc aagatetett ccaetttece teeccageag cetgeaatte agtgeteegt 48540 agacccctgc ctcccggggc cctgcggttc ccaccacact acactcaatt tccagctgct 48600 aagaacacag caggttctac gtaaaggtgg ccgtcacctg caccccatgg gctgcccggc 48660 catggagaac gggccatggt tgggtacaca gcttctgaga caggcccagc agctgccttc 48720 atggcctcgg cagagcccag ggctctggag cttacaggga gcatgtgccc aagtgtggaa 48780 aatttggtct gcagaagaaa tgaggctgaa attggctggg agcaattctt atcaaagcca 48840 cgttagcagt tttcagcaag agctaattga acaagctctg tgagtggcct cattccatta 48900 gcaggagcct cccacagagc gtgacaaggg ccctggtggc tgagggcaga aaaggctgtt 48960 tetgteceae atttgeettt ggeetttgaa aatggacaea tttteagett tgggeactgg 49020 tectgeteet etgeceegge tecegeteat ttecaaagee actetetgag tgteetgtgt 49080 ggggaagggg tgaggtgagt ttctcagcac ttcagcaggt gcgtggatct gaaacaggac 49140 agcettggag acacgteete ettgeeagge agggttgaga ggeeaagtge agaggagetg 49200 agagtctgag ggccaggcct gagcagtcta ggtcaggaga ttgggccctg ccttagcaac 49260 gtgcctgggc ctgaggagag acccactgcc ggcccagtct ccctcgactc ctctggagcc 49320 atggagteet cagggagggg acaggaggca getggggtgt ggecaggeca gagetgaget 49380 gatggaacct gaaccccact ttgtggggtg gccatgctct ctgctttctc ctctctgctg 49440 tgcccagtag actggaaaag atagatccag gggtgcagtc ctctgacctg agctccaggg 49500 tcacctgtct ggcctccage ctgtttcctc catgctaggg ctgtcagggc aagtgtctga 49560 cctgggcccg cagggcgctg gtcaaggggc ccagggaggt ggggtccagc cctctgtgcc 49620 cctgactgac tgtctgatct gggcaaggtc cttcatctct tggccactgt cacatggcat 49680 gggcgacact cctcagtgcc tccaggatgc tgtaaggaag cggcatctga ctgcacccac 49740 cctttctgca gggaccatgg tcaggacaga gctgtggaca ctgagcaggg gctggcctca 49800 gggcccaccc agacaggcct cctcatctcc cccaacacca cagcggtact ccgtcctggg 49860 agetggecag ttgccctccc caggacagga cctcaggett ccaccctgag ctccttcctc 49920 ctgccctggg ccctgcgggc tgtcccataa gctggctgct ctcctggggt ctttccctct 49980

```
<210> 19
<211> 49999
<212> DNA
<213> Homo sapiens
<400> 19
cattccggcc tttgggatgc ttcagacagc aagcaggaag cagacagaca ccccgcatct 60
ccccaggcc aactccggcc gcatcagcag caacctggtg gggaactgtc cacacctgcc 120
agtetecete ecteegteet ettgggttte tgaaccagee tetecageeg eactgeeact 180
gcgacttact ccttctggcc aaatccaagg gccctgtgca agcccctgct cttcttggca 240
geteteacae tggggacaae cegeaggete etetgaagte ceagagetge tteteggeea 300
cttectactg cetetgeetg ggagettate ageteetgee eegetgtgee eagttgggaa 360
agtatcactc tgccacccag gctggactgc agtggcacaa tcctggctca ctgcaagctc 480
tggcttccag gttcaagtga ttctcttacc tcagcctccc gagtagctgg gattacaggc 540
accegecace atgeetaget aatttttgta tttttagtag agaeggggtt teaccatgtt 600
ggccaggctg gtctcgaact cctgacctca ggtggtctgc ccgccttggc ctcccaagtg 660
ctgggattac cctgctcttt tttgcttcct ggggctgctt cttgggagcc ttgggctgct 720
cagettteat eccageeatg ecetgeetet ggteeageet eegteeetea etgtgteetg 780
cttaaggtcc ccgtgcaaag tccttccctt gttccaacag ccttccccag ctcccagaaa 840
aggtgccggt tgtagagtgt gacaggcacc aggctgtccc tgtgcccctc ctggcgcagc 900
ccttcagtct ccccttgaca cagtctgccc ttgacttctt attttccaaa ctaacctgat 960
gcttttcttt atttgtttgt ttttttgaga gggagtttcg ctcttgttgc ccaggctgga 1020
gtgtgatggt gcaatctcgg ctcaccgcag cctccacctc ccgggttcaa gcaattctct 1080
cgcctcagcc tcccaactag ctgggattat aggcgcccac caccatgccc agctaatttt 1140
tgtattttta gtagagacgg gagtttcacc atgttggcca ggctggtctc gatactcctg 1200
acctcaggtg acccacccac ctgggcctcc caaagtgctg ggattatagg tgtgagccac 1260
ctcacccctt tcctataaaa cagtcctttc tcaccatctc ttggaattag tctggcactc 1380
aggaatgcac ctctgctgtt gaggctccag gaagttaggg ccaaggccct ctggtgcagc 1440
agtgcagacc gcggcctggg ggtggggaga ctgtgtgtgg ccagtctttt atttttatt 1500
tattttttta ttttttacac cttaggcttt gacccacaca gaaagagatg gaacagcctg 1560
ggctgcaggg gcctggaaag ggacgagcat gtgggtggca ccacgcgggg cagctgcagg 1620
ggcaggggct gcctgttctc cttctcccgg tgctgctcca agggcacagt ttggtgaccg 1680
cagccactta ggggagcctt gaggatgcaa aagagagtga ggacacaagg acactagcaa 1740
agcctagctc tgaaggagga gggatgccat gctgggatgt cgccaccgtc ttgtctgagc 1800
ccaagggtgg tgctcggtcc acccgtgggg agcagggagg agagaggaca gggccctggc 1860
tgcctctggc ctgcttggga atgagctccc tcaggcggag cttgacagta tccacacgcc 1920
cagcagcaag catcatcatc agaaacacgc agcccagagc tgtgtgccca gcagaacagg 1980
gcactgggac agggacccag ccttctcagc tcctgaattg gagcctggca tgccccatct 2040
tagagtcctt cattctgtgc agatgcactt ggcatctaga gtgggaccgg agtccacgac 2100
acggcatgga aggaaatggc ccctgtgatc aaagaggctg tcacagacat ggcggctgag 2160
tgctgggatg ggctctgaat gggatgtcaa gaagcaggtg gcaggagatg ggtggaggga 2220
aacctcattc cctggaggta ggactgagcc catgacgggg gagccgcaga gggcccttcc 2340
agcagaggga tgggaccagc tttggcgtga aggccgcaga gcagagcatg actagggagg 2400
ccacctggta aaagagacgg aggctgggac aagactggtg cccttgtcag agggaggcca 2460
ggagaagett etagaaatgt agetgegtgt ttageceaat teetagagtt ggggcaacea 2520
tgccagtcac aacataggac gtgttacaat gatgtcttat tttttttca aggccaggca 2580
ctggcacatt gcttccctat tttacaggct ttgaaagaaa tggagattct gaaagcttaa 2640
ctaatttatc tggcaaggca tggtctctca tgcctgtaat cccagcactt tgggaggcag 2700
aggcaggagg atcgcttcag cccaatagtt ggagaccagc ctgggcaaca tagtgagacc 2760
tcctctctat agacaaaatt agctgggcaa ggtggtgcgc gcctgtggtc ccagctactt 2820
ggatgctgag atgggaagat caggatcact tgggccacca gggaggtgga ggctacagtg 2880
accegaggte atgecactge actecaacet gggcaacaga gcaagacett gteteaaaat 2940
taaaaaaaaa aaaagtttga aatcacgcag cgagagtggc agggctggcg ttccagcatc 3000
gtcctttaag atgtgacagc aacaggtccc acttgagaca gcaggaacgc ggcacccagt 3060
gctgcctctg cacaggcccg atgcttgctg gaaccttaaa ggcaaaggag acccgatcat 3120
aaacgcatga agagcgcatg tttcatggga ttgatgttga tgctggtgtt ccatgcgagc 3180
cactgaggag aageceetet eteaatggea gggeeatgag aggtgaagga egeeeeteea 3240
```

cccctccccc agacaggtct ttcctggcca cagatgcccc agatccctga atgtcaaaat 3300 caagtcccaa tctcccagtt gagcagagaa acattcagat ctggttcctc cgtgatcagg 3360 gaaggcaggc ttcctctgaa gcgcagatgg cttcacccct ttctcatctc atcacctcta 3420 agccctgcca gggcgagagc agcctttccc agcatcgtcc tttaagatgc aacagaaaca 3480 ggtcccacct gagccagcag gaatgcggca cccagtggct ggctctgcag tcttgatgct 3540 cgccggcacc ttcagggtga aggacgccct gtcgtaaacg catgaagagc cctgcgtttc 3600 atatattgat gttgttgctt tttctttaga ggaacgtttg tgcactgtgg gaacctctgt 3660 ctctaccagt gtcacccttg ctgtggggag tgtgtaccgt gtgcgggggg ctggtggcct 3720 ttctctgctg tctgccacag cgtgtgaggg gctcgctgag cctcacacct gccctatcct 3780 tccccatccc ctcctgcccc ggggaggcac agacccaggg aggaggggtg ctgggagtga 3840 gtgctgagga gctggggtcc tggccctgca gccactgtca caccacagcc ccaccccaga 3900 cctccagagt cgtgggactc tggtggcaca agctccagaa gcttggtcga tgccaggtct 3960 gggaccgagg cccccgtctc cgaggccttg gcttgctgtt ctggaaggtg atgctggctg 4020 gcagccattc ccagcccctc ggagagcagt tgtcaggcag tccctgagct ccagcgcccc 4080 attcccagca gggcccagtg atctcatgcc tgtgcccctg gtgctgggag gagcgggttg 4140 gcactagggc cggtgtccac atcagaggag gaaggtctga agccagggca gggggcaggg 4200 cacceteceg tecageggee ecagtgeeca etecatteet teggggetee egtggeecag 4260 agtgtggagc ggcgcggcct gaccacccag gatagcttgg ggcgtttcgg aggtttggct 4320 gcctaggctg tgcacctagc actgctcccc aggagaggga gggaggaggt cagagtagag 4380 ggccctgctg accaggtcac tgtcacagcc tccatctctg gccctgggtt cccataggag 4440 cgcctaggct ctaagctgga gctgccccat cccaggacct tggggaggaa gaggctgggc 4500 gccacctgcc ggcccaccag ggaattgaca gggtggggga ctgtggagcc tgtgctggcc 4560 gcagatgaga gccctgaccc ccaccttccc taccccaccc accctgcacc gtccagctca 4620 gttctctgac ccgtggtgcc aggtcccatt tgcaatggcg aatactgaac tcggtgcaac 4680 cctggctgct ggcagctggg cttggcctgc accttcctgt ccccagactc cactggggac 4740 ctcccttcca gccatcccag ggcgtcacca ccacagccag gggccagccc caccttcatt 4800 cactettget catageetae etgtteacte tgcccccate tgctacetge ageateagaa 4860 ggacatgagg gcaccagaca gcccctgcag ctgtcctcaa acatcatggc caaggctgcg 4920 cctgggaagc ggactctctg cagtgccagc tccctcctca gtgcccttga cctttatctg 4980 ggtccctgct tgatgtggcc caactggctg ggccagagcc ccacaggcgc tgtcccgacc 5040 cccagccccc tagagggagg gagaggctga gacggcaagg gaagcagaga ctcagccaca 5100 ccaagggccc tggcaaggtg ggcctctcct ccaaagcctc accaggcttc acgttcaagg 5160 tcaccaagag tgcacttgtt cactgtcgag ggcagaggtg actcctggga ctgtgctggg 5220 ggtccaggga gagcaggtag cggagttgcc agggaagcag cttgcctgag gtctgtggtc 5280 ttggcagggg cttccgcagc ggccccaccc tctccctttc ccctccctcc tgtccttgtc 5340 ctcgtgttta ctgaagatca tgagaaggga tgtggagagc gcctgcagga actgagagca 5400 ggagcctggc tcacccccaa aggcccccag acattcagtt cctaaaccca tagggtgggg 5460 catgggcaca gaggagaaac cggggccgcc cggcacagcc ctgctctttc accctgcccg 5520 cctggtggcc tccttagcct gcagcctcgg agcgacccag tatggggaca tgctgccacc 5580 tgctggccac acttcaaaat gcaacccagg gtcggcctgg aggctacagg tgtccctctt 5640 cccccaggcc tgcaactggg ctggggaagg ggcaccaggg aacagcccag gtgctcctgc 5700 ccaggaggat tgtccgactg cgtggggaga aagtccagaa ccgtgcttgg cacatggtaa 5760 tctttgtgga atgagtgaac aaatgaatga atgaactatg catctgatgc ttttcggtga 5820 tgatgaccca accaagatag attacatgag ccattttcca gcaggaactg ggactcctct 5880 tgggctgaca agatgtaagt atgaaatcta aataagattc caatggcact agacagtgac 5940 acacgtgacc ctagctataa atgcccatgg aagagaattc tgtctgacat tcagggaaga 6000 cttggagcgg ggcaagggga tgggattgat ggcagaagtg agactcacag gacacgtgtg 6060 ggagacccct ggctggccat gttgggggag gaggggcaac aggaaagcag cgcctggatc 6120 tcgagggact tggctggctc agtccttcca tcgggagcca catttattca cagcgactgt 6180 tgagtctaac aacgctcaag tacagcaaag ctggagcaac aggccctgaa agggtgactc 6240 cagggtetea ecceaectg acteetteee teetgetgee teagactete etgtetaece 6300 tcagagaccc tgtcgggagg cttccctcca acaaggcacc atccccaggg agaagggagc 6360 ccagcactcc tggccctgtg gggtcctcag tccactcacc actgccacat gccccaggga 6420 gtcctcggac taggacctgg gccgggcccc cctgggttcc tatggcctgg gcgagcatgg 6480 tgccctctta cagcctgggc tgcccgagcg ttccaggcat cctgtcattc agcagagatc 6540 tttcctcggt gccttctctg gattgggtgg gctgctgagc tctgggggctg ctgccgtgaa 6600 ttatttaata gatgggtgct tccctgctct ccagggtccc cctctgggag agccagcaca 6660 ggagctaacc agtcagagga gaaggcggtg tagaccagct ggtgcagggg agaccatggg 6720 ggtgctgggc aagacaggga cttggcggaa cacatgagat gaggcagggc tgagccccac 6780 aggcaactcc tecececaga geegggeatg aggtgeteag eggatgaeea eeageteeee 6840 gagctggacc acatgtcaca caggtttctg ggatttgctt ctagaaaagc ctgacccaaa 6900 catttggaga tgacaagtac tcactggcct ggaaggaggt gctcaccaac atgtgcttcc 6960 ggcccatgca ggtaaggagg gcccagccca gtccccatgc aggtaaggag ggcccagccc 7020 cagtetecee egeteeeggg ageacactgg ecceagaceg gtgaceteta egtgeaagea 7080 caggccccca ccgttcctgc ctgctctgga catggctggg tggacggggg ctgctccacc 7140 tetgecagag ggtgggagag gaggeegaee eeaggeagea eetaggaggg ggeaeeetga 7200 gcctcttgag tttgagccgc tgtctcctgc ttacacttac ttaaggacag agtgccctgg 7260 agctgagggg ctactgagac ctcctgtcag gctggggtcc tggaggagag acagggtccc 7320 atgtggcttc ctgtcccagg gaacactccg cagcctccat ccccacgtgg agtccagaac 7380 cagctgtcag cctctggcca gtgtgggaaa gaagcagact tggccggggg cctaggcctg 7440 ggcctgcagg gaggtggcag cctgtggggt ggacagctgg gcttgctctg ggatgcctgt 7500 cacagogoco caggotgago ttccccogtg cagggocoga gcatcctggg accaggacoc 7560 cagaggaccc tcgggtcagc gggagcagtg gttgctgatg ggtcggctct gggtcccggc 7620 ccggcccagg gccagggaca ggctatattt taggggctcg gtcactcggc agattcaatc 7680 tgttcacaag aactggatgg cttcagctga cctcagtgga tttattttct gacacttcaa 7740 gctctgctgg gtttgaagcc atcagggcct gcttgggcct ggtcaccgtg acctgccccc 7800 agtcacaagt gtctgcccag ccaagcacct gtggcaccca cagcggagag gggctgggcc 7860 gtgcctactg ggctctctct gttctacact gcagcggctc taggcctggc agagaaggcg 7920 cagcagecee tgagteceag aactgeetet ggetetgeee tgetggggee eeteceatgt 7980 ccctgcctct gacgccatca cctccaagga ggtacaagcc aagctggagc tccagagatc 8040 agagccgctc cagagttagc cagagcccga aaaggctgca ttctcctggc tcgcctccca 8100 gggageteag aggegeeett geeegggaat eegatggeag agagttaeea ggtetgeggt 8160 gctcctgttc ctcagcccgg ggaactgggg tggggacagg acagagcagc agcagagagc 8220 acagaaaggt gtgaggggca cacagtcccc agtaacatct gcatcaggac accagggctg 8280 teccagget gteccaggga tggetgggee tgtgggaaag ceatggteee cacceatece 8340 accegacect gagecacete caccagecaa gaggggecag ggeeetteat caaceteace 8400 caggicatet ggggaactgg gccaccactg agaacaaage ccagacatgt ctgggagtgg 8460 gctgtgccca cctcccccag agacttgccc ccaacttaac ccagggccca gcaggggctg 8520 gaagggaagt ggagttaggg agcggagcag gtcaccatca gctgcgccct ggattccagg 8580 gcccgtgtgc acagagtaac gggagccggc tgtctgtctg gccaagggca caggagggtg 8640 agtgtgtaca gcagccaggg agcaagggag ccagagagac acacaggagt gaccttggac 8700 ctctgcgagg aacccgttca ctcgctccca ggcagtagca ctggccctga cacccagccc 8760 tgaaagctcg gagactgcag gacaaacagc ttcaggggct gtggccccag ctgggacggg 8820 ctatgcgctg gtccctagag actctcggta tctccccctg ccccagtcct gcctcctgcc 8880 cagcacaagg gcctttggaa ctcagccctc tgtgtctcag cccccgggag ggtcaggtgt 8940 cagagacgag aagggccgag gctggcaggc cggaaactgc ctcccttggc tgctgtgggg 9000 tggagtacca ggggacacag aggtgctggg gtgaagcgtg gcttcagctg cgtgggatca 9060 atgccagagg ggatgaggtc agctccgacc aaaggtgtgc ctaggtccga gaggaagcgc 9120 caggagectg aggeetgtgt tgcaegggge agggaatgge atectggget ttettgeetg 9180 cctcccactc tagccaggtg gagcaatgga cttggcctcc ttgaacaaag accacagcct 9240 cctcagcttc tgcttgtgtc tccagcagac agcgcctgca gcccccggtc atacatggcc 9300 acaggettee eceteeteet teetgggeea gagtageage eteageeeea tgetggggag 9360 gggtagacca gagacggttc cctcctggtg gtgcccagca gtgactcagc agcgacggca 9420 catgtctggg ccattctcag tgctgccacc ttgagggcat ttgggaggcc caggcaggcc 9480 agatttgtct cctggagaga agtatgggca cccctgggct ctgcctgcct cctggcctcc 9540 ccttgggttc ccttgtacag aaaggggcac tggtcctggc cctggtcctc cctggctttg 9600 ctcagcagcc agcagcccgc caggtctgtg cacaccaagg ctgccgatgg caaagctgtg 9660 ggtggcatgg gacctctggg aatagtcgga aagctctggg ctggccaggc tctgacccgc 9720 cccacagatg gcactttact tctgctcggg gctgctgcag gacctggcac agttcgggca 9780 ctatgcgctc atcatgcccc tgtacacaca cttcacccac agtgggtgct cggtggccca 9840 agaccattca gcggtgatgg tggaggtcca aaggtcgggc gacccaagtg taggggaacc 9900 tgacctgaga acteteteta tgggeeggtg etgeggaage tgeagggggt etacageeag 9960 ccctggacac agccgagagg agggcgctga cctcggaggg ctgctttctg ctgccctggg 10020 agetgggtgc tggggtccta atetgtcgtc tggggtggag caccatgcag ctcatccccc 10080 agccatcacc attccccact gcccgccccc caccctcatg ccccatacaa caccgcccac 10140 gaccccgccc cctcttccca ggctataggg agcgactaga catggcgccc gataccctgc 10200 agaagcaggc agaccactgc aacgatggcc gcatggcgtc caagcacatg aaggaactca 10260 gcaccggtct cttctttgcc attctggtca aggtgagccc tccagcctgg tgcccctcac 10320 ctccctctgg ctcccgaccc tcctgggcac ctgctcacca ggaggcctcg aggagcccag 10380 ggcagtgcca ggaggtgcca tggctgcagc actgtccctg caggagagtg gccccctgga 10440 gtcagaagcc atggtgatgg gcgtcctgaa gcaagccttc gacgtgctgg tgctgcgcta 10500 tggcgtgcag aagcgcatct actgcaacgt gagtgccctg ggagagcccg ggggcgggcg 10560 gggcagccca agccatcccg cactggaggg gcacaggctg tgatgggtca cactccaccc 10620 ctcgctcccc cagccctagc acaaagccca cctgatgggc cttgctgaga cgcccagctc 10680 teccaectgg gatggtgget ecaggeecag ggteaggeet ggeeceette eccaaggace 10740 caggaaccag agagcaggcc cctccatggc cagtacagct cggcaaggtg tgcaggcttt 10800

ggggactgtg tttataggaa cgtgaaggaa tgaaaggcca gcgaatggtc cgtggccgct 10860 ctggaaactg tgtcccctga agacaaggaa gagagctgtc cctggctcga ctcctgccct 10920 gagtgactgt tgactcacag ttctctctcc aaggggacat gggcctgtcc taatgctgcc 10980 ttaggggett ggetecaget ggeeetgggg tetgeaggte accaeetgee eetgtgeetg 11040 gctttgaatt tcctaacatc cagagtgccc tgggaggaca gtgtccagcc cgttgtgtgc 11100 agtaaacgtg gtgttcataa ccgggagctg ggcagaagag gaacgacaga gtccccctgc 11160 ggaccetggg ggetetgtat cetgaagtte aageetaget caccetgetg tgggeecage 11220 cctgcctgca ctgacagatg gcaccagcag ggggcgcagc gttccgccgc cacagttctc 11280 tgtccccacc tcagtgcagt cagccctgga cgccccacca cttgccccca atagcacaca 11340 gagecaeggg cetteceage ecceaeceet ggeeettggt caeteteaee tgetgeetea 11400 gccgaaggtg gcctggcagg ccctccctga atctccctcc agccaggcag gggtgggcca 11460 gggccaaggg ccacctccaa gcagtaaagc cctccagggt ggaagggcag gtggccccct 11520 etgtgtecea tecceettag teetggeaaa eesteacetg eetectgegg tgeeceetge 11580 ectettetgt gteceetggg etececeage actgeatect geegggtagg gttteaggae 11640 ccccaagccc tcccagctca cccagaccct tcctgagggt cctgcttcct ggcaccacct 11700 tetetteett ggggaeaace acagtggaga gaggeaggge tetgeetgte etgetaatge 11760 aggggtgetg gccttctggg gtcctttaga gaacctgatg aaagctatga gtttacaagc 11820 aagaaattgt ctggcaccgt tttcactaac aacatgccct gaaggtggac ccgggccctc 11880 aggttgtgtt ttataagcct tgggagcgct caggatgcat ttgactcccc agctctgccc 11940 tgatccaggg cattcatcct ggagcaggcc cccgttacag acaggcgagc agaggcttcc 12000 agaggccaag ggagggtcct gggggtcctt ctgcagggcc ggaggcagag ttgcgcctcg 12060 teateaagee etgecatett tgteeettea etgeeggget etgeacaggt cateaceate 12120 ttcagcctgg tggaggtggt cctgtgggca gccatggccc tctagtatag tgctgtcctg 12180 aggcagccga gcaaccaggg ccacctggtc cccgaggaag aggaggagga gtaggtcgag 12240. tttgaaaagg aacctgaggt ctgatgtgct ggccaagctc agccaaaccc tcctgcccca 12300 ccccgctagc tttaggaata ggacctgatg acaccaaggg ggatttttaa tttaggtttt 12360 aacaactcaa gggtttgctt ttggttttac ttttgcattt tatttagtgt ttgcagctca 12420 gtttttaaac aaactgcagg ggagaggatg gagctggaag gaaggctgag acctggccag 12480 caatgagacc ggttcccctt ctgcccgggc cccactgcct tctccagccc agggaatggg 12540 gccttttctg caaatcagtg tcagggaata aaatcaagtg tggagtgcca tctggtgtgt 12600 ggggcgcctc tgggaagcct gggcagcgga atgccccttg cacccagggc aagggaccca 12660 gttcaggctc caccectcac tgctgagccg atgtcaccac ceggaacctt cctgtcagtt 12720 ccagcacgat tcagagtcgg ctacgtggca gattggtgcc ggagtctcat tctgcctgat 12780 taaaaatgga attagtatgc aggactgaga gcgcccccgt caccctgacg catgtgactg 12840 tgtccaaccc tgcccccact tcctctctgc accagctccg cagggcctgg tgggggtcat 12900 aggteetgea acaccetete eccgeagtte ettggeeaac actetgaatg geeetgteta 12960 taccetgggt etgagteagt geeetggeag etceaggeee aateetgtge tetggggaea 13020 gaagcaggcc tgggcctcgg ggaggggaca agggctatcc agtgccttcc caacctggcc 13080 ccgttgccca cccagtgtcc tgagcaccca tggatcccac ctgccttggg gcctgggcag 13140 agetggetgg ccaetgggea tteeetteee cagecageet gaeeecagee tgeaeteete 13200 cccctctgtg ggggaagctc cgtggcttgg cgtccccgag agctgctaga aactaggatg 13260 aaagccatgg tgagcacggc ctctgttccc ccgcaccatt tcctggggtg tcgggattaa 13320 caageteatt tgatetggtt acagtgaatt ttetteaaag aaacaeteaa tagggteeet 13380 tgtcagagtg cgtcgcagcg cctgaatgac agcgactggt tatggctgcc tttgttctgc 13440 cactgtcaga tggggctggc tgtgggaggc gaccaaagac atcccacacc tgccctggga 13500 gcctttccct cctccagggc tcagccacct caggcggcct tcagtctgtg tgtcctgcca 13560 cccccgagat gtcccagagg ccacggtcac cccatctgtt cctgtcccca gaaccttctc 13620 ctggagccaa gtatctgcag ggacagacag gcgagcgtct gggggtttgg tgttggggtg 13680 gagaaggctg tggggtgatg ccccagccca ggcagcctga ctgtgagagc cccaaacagg 13740 agacatecea geceetteee eteceeteea egetgeeeae eetatgagga geagtggeea 13800 attteetete tgggettete aggeeagget ggeeetgtee eecagggeet eecaegaage 13860 atgggagetg tteceteaca ggeageacag acceggaegg acacetgtee etatgteeca 13920 gcgccccag gccccagtaa ggagtagcca gggggtgaac aaggggttcc tgctgcctgg 13980 gcttgtttgg gaagcagatg ctgggctcaa agtttcttca gagagcctca ccttccgtgc 14040 tggccccaga gcatggcggg tccctggagc tgtggaggcc atggcagccc cagcccaccc 14100 gtgacctggc aaggttgtgc ccagccagga cctgggctca ggcccaggca gccgccacac 14220 cctacccaga gctcagagaa ggcagcccag ccttctcccc acaccagtca caccgagccc 14280 cgcgtctgca ttcactcctt taaggaacat ggttgactga atccggtgcc gcgcattcac 14340 aggatggctc tccatgggtc cgctgggggc ccagcctctt atgtggcccc tcactaaaag 14400 gactcaacag aaagagtgac cagacaccga ccctcatcta aaggaggact tggccattcc 14460 ctgggctgtc ccacagcacc tgccggccag ggcccgggca cagagcgaga ctgtcttttc 14520 ctcaaggaga caacgtgggg gagagaggga gaggtagaca ccatcaacct cattccatga 14580

ccagggcctg gcgatgctca gaagccagtg agtgtgtccc aaccctgaag ggtcagtacc 14640 ggccccctgg acctaggggg aagatggtgc aggcagtgac ctggcctggg gaaggagctg 14700 aageteecag agettgeage cacceacetg gggagagaet gaegeeteee cagtteetgt 14760 taggaaggac ctcaggaaag aactggaatc acacagactg gggtggcagc ctcctggccc 14820 ctgaggagga tgtcaggccg cagaagggag gcacgggcat gaagcttggg aagggggcac 14880 cagaggagge aaggeetgtg cagaageage accagaggee actgeagegg etceaceace 14940 cagcagcacc gccacgaggc aggaagtggg aggccaggca ggaggggctg tgatcgccca 15000 ggtgccagga ggaagggctg agaggggaca gtgcagatgt ccagagaggc ctggcgggga 15060 taggccacca aagtcacagg tgggatgggc tttctccagg gagttctaca gcacagatgg 15120 tgccgctggc cgggccgtgg ccagctctgc acatgagcct gccccagtcc ttgccgggca 15180 cggaccaaag agtggttcct gggttggaat cacagaattc aggggctaat ggcagtcggg 15240 atgggaattg ggagggggga agtgaattaa atatttgagc cetggtggag getatacagg 15300 atgttcacgt taaagaaggt tctggagaag gggatgattc ttggaatgat gagtattagt 15360 ttccacatgc ctgagtttag gttctggatt taaaacctta ttgtaagatc atctctttga 15420 accttctctc taattgtggg gtcttatggt ttgggggaaa ttttacttat ttttgttgtt 15480 ggttttttgg tttttggttt tttgagacag ggtctccctc tattgaccag gctggagtgc 15540 agaggetgga gtgetgtggg gegateaggg eteaetgagg eetgeaeete eetggetgaa 15600 gagatectee caetteagee tecceactag gtgggaatae aagegagtge caecatatee 15660 agctagtttt aaaaattttt tgtagtgatg gggtcttact atgttgccag gcttgtctca 15720 agctcctggg ctcaagtgat cctcccgtct cagcctccca aagtgttagg attataggta 15780 tgagccacca tgcccggccg atttgtttt ttaacagata gaaaatcatt tgagggggaa 15840 ttgctctgtt gcccaggctg gagtgcagtg gcatgatctt ggctcactgc aagctctgcc 15960 tcccaggttc acgccattct cctgcctcag cctcccaagt agctgggacc acaggtgcct 16020 gccaccatgc ccggctaatt ttttttgtag ttttagtaaa cacagggttt cactgtgtta 16080 gccaggatgg tctcgatctc ctgaccttgt gatccgcctg cctcagcctc ccaaagtgct 16140 gagattacag gcgtgagcca ccgcacccgg cctaaataat ttattttact taaaaaacag 16200 ttttgctcaa cctcgttcat gagctgtgtt gtgttcttaa tgtttatcaa tagtacattg 16260 ctcagttctg gaaagcactt agccagatat ttaaaaaagca acagaaattg aagggcaaaa 16320 tagaagatgg aacaaaaact ctccaatagt gtattcaact taacaggttt tcaactcacc 16380 agggtgctat tggaatacaa ttgtccccct ggttcctgtc atacaagatc aaagttaaac 16440 cactaaacac aattgcagca tccttgactt catacacttt cctttccaca catccatata 16500 gacgcccgaa gcaccettca gggcagaatt gtettttgtc cetcactetc aggggacaac 16560 catgcactag ggcccacctg ccagccaccc ctgccactgt cactactgct ggtattaggg 16620 ggcaggggtg aaggaggtgg ccagatcagg gctcggggtg cctggctgag tgcccctcc 16680 actgagecca tteetgtgee tgeagettee caeaggetga ggeeceagtg teetgettgt 16740 gctgctgagg gggctccatg gcctgttgag aggcctcccc aggaagccca tagggaggag 16800 gttggggtgt ctcctgcctt gggggtggga cagtcccttc ttgttcccac cccaggtacc 16860 tgacccaagt tctcctgtgc atgaggaatg cctggatgtc cctccttggt aggtgggatg 16920 ggccagaggg aggtcctgcc tacacagccc ttaattagga atttagagat ttgtgctcta 16980 ggaaggaget gettecacta ccatttggec aactgtgtge tgtgeagace egeagettgg 17040 aaacaggttt caaggatgtt caggacttgc ctcgtgttca taaaggtcag gggtcgcctc 17100 ttgccccctg ctcccctgct aactctgcag caggccctgg actaattaag tccccgcaac 17160 ageccegaga cecaggetet gtgaaagttg teagaateaa aatggageea ettetgteea 17220 accctaagag caacaacaaa atcatgcggc cgggaggttc tgaaggaggg ccctcccgca 17280 cacctgccta tgatcagagc ccttccgaag cctctgggaa gggcgcagat gcctgcaaca 17340 agaccttttt ttatttttta ttttttgccg ggactttgca gctcactatg tgagtcacaa 17400 ggacggctag ccggctgcac aagaacactt gcctaataac gctgtgtcca ctcataaact 17460 tatgceggtt cetgggataa geeeetggaa teagtgttet etteetttea aaacggetgt 17520 gtaggtggat gtggtggtga gtgcctgtag tcccagctac tcaggaggct gaggcaggag 17580 aaccogggag gcagaggttg cagtgagctg agactgtgcc actgcactcc agcctgggca 17640 acagagcaac tcaagaaaaa aaaaaaaaaa agacaaaaac caaaaaccga ccatgcactg 17700 ctectttege ettteaaage acceettgee teeecteete egatgegeee etagtttaet 17760 aaggccgggg ctctgcatgc aatgctgctg cttattccca gttaaactcc atagttttgg 17820 agageeteee tetgtttett aaggttgaca ggactateat tettttegtt catagatgag 17880 ggaattaagg cttggagagg ttccgttctg aaggacactc agtaagtggt ggacagagaa 17940 tttcagctca gactcaaagg ctatttaatt tacttctttt aaatccatgc ttcttagcac 18000 tragctagte acgtateace ttgacaactt tttgccgtag ccacattact gcctgtggta 18060 tgatttgctg aatatttttc tctacataag ctcagatttg ccttaagtct attagaaaag 18120 gaaacttgta actgaaaaat ggaagaccac catctcttgc cataaacaga agcaactgtg 18180 tattccacac acaccaaaag cagtgttctt acagcctcct tagatgtttt gagtctaaag 18240 catgctttat cttgttaaag gggagatggc aaagttaggg tggcagtgaa actaaccaaa 18300 ggtggggaaa ctatgcaaag tccacaaggc atttcttatt tttttctttt tctgagatgt 18360

tgtctcactc tgtcacccag gttggacaca tatctggttg tcaaggatta gggacagggg 18420 aagaggtaga ggaaagaggt ggcctggtta taaaagtacc ctgtggggtt ggagctcttc 18480 agcatctcaa ctatggtgct gttacacaaa cctacttagg tgataaattg tatacacact 18540 cccacacaca tgcacacgaa tacaggtaac actggggaaa tctgaataat aactgtggat 18600 tatgccactg ggggagacta agcaaagtgc acagacatct cttgtacttt cttcttttt 18660 ttttttttgt ttagacaggg tcttgttctg tcacccaggc tagagtgcaa tgatatggtc 18720 ttgactcact gcaacctcca cctcccgggc tcaagtgata ctcccacctc agcttcccaa 18780 gtaggtggag agataatttc agctcacacc caaaggctat ttaatttatt tcctgtggag 18840 ggaccacagg agcaggccat ttcgctccgc taatttttgt attttttgta aaaatgaggt 18900 ttttccatgt tgcccaggct ggtctcaaac tcctgcgctc aagtgaatct ccgcctcagc 18960 ctcctaaagt gctaggattg caggggtgag ccactacgta gggcctcttg tattatttcc 19020 cttttttttt ttttttgaga cagagtctca ctctgccacc caggctggag tgcagtggca 19080 tgatctcagc tcactgcaac ctccacctcc caggttcaag tgattcttct gcctcagcct 19140 cccaagtagc tgggactaca ggtgcatgcc accacaccca gctaattttt tgtattttta 19200 gtagagatgg ggtttcactg tgttagccag gatggccttg atctcctgac ctcatgatcc 19260 acceaecteg geeteceaaa gtgetgggat tacaggeatg ageeaecgea eccagettgt 19320 attatttctt acaactactt gtgaatctat agttctgtca aaaattccaa cttaaacatg 19380 aaactcaggg tggctataaa gcctcctgac tcaccttgac tttggaatca atcaatcaat 19440 taattgagga gacccattag tgagtctcct ctgactttca gccaagaatg ttcctaactc 19500 agcaagatga agcaggaggt agaggaaact aagggggcaa caagcagggg gcaagaagga 19560 cctatgagag cgacatette cctgagagee ccaggacgae caccgggaag ccaggaggge 19620 gcaggcagga ggacccagga aagctcggcc tgagggaggc cctaggcgtg gtggggagtg 19680 gggcagggca ggcaaaagct gggcagcagg tgaggggacc tgggttctga gggccaagcc 19740 tggggtttga ggtaaacagg ctcgagtgga gaaggggctg ctgtggttgg gctggggtgg 19800 gtggagctgg aggagccttt tcttcttgaa ccagtttttg aattgtggta caaaacacgg 19860 tacatcaagt ttacctcctt caccattttc aagtgtacag ggcggcagtg ttgagtacac 19920 gcacagtgtt gtgcagctga tctccagaac attctcatcc tgcaaccttg aagctctgtc 19980 cctattaaac tccaactcta accctaaccc caaccctaac ccattgcctc ctccctcagc 20040 ctcaggcaac ctccattcca cttctgtctc tatgtatttg actcccctcg ggacctcaga 20100 gaagtgtgtt cgtgcgtatt tgttcttttg cactggtata tttcactgag cataatgtcc 20160 taaggttcat ccatgttgta gcaggtgtca gggtcgcctt tgttttcaag gctgcgtgat 20220 acticating atomical activity at a second activity a gtagcttcca gctcttggct gctgtggata atgctgctgg gaacatgggt gtgcagttat 20340 ctgttcgagt ccctagttcg cattcctttg gctacacact cagagtggga tgtctggact 20400 gaagcaatac ttttgaactc agcctgaggt taccaaactc tctgaactcc ttatcagagg 20460 ctacacttct gggtgttccc cggggcccat ggaaaacaga ctcaccccag gctccatcta 20520 cctgtgcaag ggaacagggg tcaacctcaa gtgcacaggc tgctctggaa gacccagccc 20580 aggtctggct gacccagagc actggcccct tcccagcctg cgtcctcagg acataggtgt 20640 gggcacccat atacaccaag tgggttctag ggcagccagg ccacccagtg tgcctccttt 20700 cacacteete tggggetegt gacattacga geectaacee gggeeetgge etaggetgtg 20760 tgtttccagt ctcacctctc ttcacacctt gaatgaggtg aatgaaggag tggcaacgcg 20820 teteccacaa gacaetgtga gecacaecca gteeetteee tteageaagg ttggetteag 20880 gtcacaggac tgggcggggt caagatggac accaggggtg tggggaggga cgtggagcat 20940 ttacagccag gggcaaagtc cttcccctga tttaaaccca ggcagcctgc gctgcagccg 21000 gttcctggtg tccccacttc gcctccctcc tgctgccccc aagacatgca ggggccctgg 21060 gtgctgctgc tgctgggcct gaggctacag ctctccctgg gcgtcatccc aggtaatgag 21120 getececaag etgttecaca cacagggeac ecceteagee aggetgacet gatetetact 21180 ctcccctgg ccagctgagg aggagaaccc ggccttctgg aaccgccagg cagctgaggc 21240 cctggatgct gccaagaagc tgcagcccat ccagaaggtc gccaagaacc tcatcctctt 21300 cctgggcgat ggtgagtgag caaggcctgt ccagccccgt agtcctcaca gccccggcac 21360 ccgggacctt cagtggttcc aggacaaccc tggggcccag gactcacaca tttctgctcc 21420 ttcagggttg ggggtgccca cggtgacagc caccaggatc ctaaaggggc agaagaatgg 21480 caaactgggg cctgagacgc ccctggccat ggaccgcttc ccatacctgg ctctgtccaa 21540 ggtaagggct gggccacctc agagtcctcc aagcagagga gagggatcaa ggatatggag 21600 tgtggcagga gggagggagc caggacagct ggggcctaag ttaggagctg ggagcagtta 21660 ggatcccaga ggaccagaac caggtccttg gttggggtct gggtgtccgc cccgaagtag 21720 ageteagggt gteteegtte geagacatae aatgtggaea gaeaggtgee agaeagegea 21780 gccacagcca cggcctacct gtgcggggtc aaggccaact tccagaccat cggcttgagt 21840 gcagccgccc gctttaacca gtgcaacacg acacgcggca atgaggtcat ctccgtgatg 21900 aaccgggcca agcaagcagg tgagctgggg cccgctgtgg ggtcaggacc aggcccaaga 21960 teteggteae egateetgae etetgteaee eteaggaaag teagtaggag tggtgaeeae 22020 cacacgggtg cagcacgcct cgccagccgg cacctacgca cacacagtga accgcaactg 22080 gtactcagat gctgacatgc ctgcctcagc ccgccaggag gggtgccagg acatcgccac 22140

tcagctcatc tccaacatgg acattgacgt gcgacccccg ggccaagggc tggggctggg 22200 cagaggggaa ggtggcacag gctcagatcc aggcaaccaa aagcctgatc tgggtcagca 22260 ggttctggag gtggagttgg ggatgtagaa tgtgcaatac aggctgggcc attcccacag 22320 ccctggggag gggagccagg ggctatgcat gaggaggggg cacggggcca gccaggcccc 22380 caaaccacct gccccatcca ttgtcctcag gtgatccttg gcggaggccg caagtacatg 22440 tttcccatgg ggaccccaga ccctgagtac ccagctgatg ccagccagaa tggaatcagg 22500 ctggacggga agaacctggt gcaggaatgg ctggcaaagc accaggtgat gggggctggc 22560 gggtgtggga ggcacggcag ggggaggcca agtgtgtggg tctcagggct gtgggctgaa 22620 geetggetet gteeetgeag ggtgeetggt atgtgtggaa eegeaetgag eteatgeagg 22680 cgtccctgga ccagtctgtg acccatctca tgggtaatga cccccttcct gccctggcat 22740 tecteagaca aceteagagg gtgccateeg ageetgtgtg eccatttgee ageaceetee 22800 cgctcacagc ctgccaatca ccaccaagct ccttgtccca caggcctctt tgagcccgga 22860 gacacgaaat atgagatcca ccgagacccc acactggacc cctccctgat ggagatgaca 22920 gaggetgeec tgegeetget gageaggaac eeeegegget tetacetett tgtggagggt 22980 gcgtggtggc ccctggggag tggaggaagg cggggcgcgg cagggcaggt tcaagcatca 23040 ccccctctg gccttcctgc aggcggccgc atcgaccatg gtcatcatga gggtgtggct 23100 taccaggcac tcactgaggc ggtcatgttc gacgacgcca ttgagagggc gggccagctc 23160 accagegagg aggacacget gaccetegte accgetgace acteceatgt etteteettt 23220 ggtggctaca ccttgcgagg gagctccatc ttcggtaggc ctggggagag tggcaggtgc 23280 tgctgcatca attatgaggg tgaagtttga gcctcagttt cctcctctgt caaaagtgtg 23340 taatgctggc accagcccta tagggatctt gtgaggaccg agcccccgaa caggcaaaaa 23400 gtggcggtgc ctggcacata ggaggcactc ccacagctgt ggtcagctca actacaggga 23460 cccgcatctc cctacagggt tggcccccag caaggctcag gacagcaaag cctacacgtc 23520 catcctgtac ggcaatggcc cgggctacgt gttcaactca ggcgtgcgac cagacgtgaa 23580 tgagagcgag agcggtgagt gaggctgaat ggcccgtgca gggggaccag ggtgccaggg 23640 atgggggcat tcgcgggagg aggacgccgc ctgcctgccc tgaagtgcac tcaccctcct 23700 accagggage eccgattace ageageagge ggeggtgeee etgtegteeg agacceaegg 23760 aggcgaagac gtggcggtgt ttgcgcgcgg cccgcaggcg cacctggtgc atggtgtgca 23820 ggagcagagc ttcgtagcgc atgtcatggc cttcgctgcc tgtctggagc cctacacggc 23880 ctgcgacctg gcgcctcccg cctgcaccac cgacgccgcg cacccagttg ccgcgtcgct 23940 gccactgctg gccgggaccc tgctgctgct gggggcgtcc gctgctccct gagtgcccca 24000 ctccggagtt atcctgctcc ccacctccgg gcgtcctgcc ctgttccccg tcctgagccg 24060 ccacttccag cgaacacaca caggtgtcct gccgttggac cttcacctcc tagagataaa 24120 ccagcctcag ctggcgcagc ggggcccttc ttccctccgc atccccttca gggagcagga 24180 gcccagggcg ccctgggagc tgagcctggg acttccagga cctcccctca ggttgttctc 24240 tgattcttcc tcccaacccc agagactgca gatttgtgcc atgcggctgc ctgcacccca 24300 gacaataaag ggaccaaaac cacccaaccc ccaccctgcc tctagcctaa ggaagaccaa 24360 gcaggcctgg acccagagac gtcccccatc gtgggacacg acacacccag accgcgtgcc 24420 ccaccgtctt agcttcaatc ctggcagcac ctggtagacc caaggacttg ggtggatcag 24480 gacacctgaa gaagagaagc ttccggcaac cctgcaaccc acccaaggag gctactggat 24540 cggggattcc caggggggct ttgacacagt cctctgctgt ctccccacta ggatcattcc 24600 acacccctgc acctgaccaa gggacccatg aggcagaggc ttgccccaag tcacagccac 24660 tcagatgctt cctgccccc agtgcccatt ccaggtcacc agatccaagg agcgcttgag 24720 gagetetggg tacagggeag caacceagag eccatgggee etecegggae atetggatge 24780 tgggcataga tttctcaaca aggaagactc ccctgcctcc tcaaggtctc cattctccta 24840 ggagacaaag caataataaa aggtgttaga caatgtaatg ccagtactac ttcctaggag 24900 aaaaatcatg agtgagtgtg ggcacagtat ctggagaggt ggataacgca ggccaggagg 24960 tactgctgag gggcagatga ttgagcaaga gacttgaaca gagtgggggc ttgagcaagg 25020 cagcacagca gtgcaaacgc cctggggcag tgtcagcagg tgctctggga ggccaagggc 25080 tggatcagag gggtgggggt gggtgggcag agtggggaaa gcctgagggg tcaggagagc 25140 ggggtgtgca tgggggactg tgaagtctgg ttagaggggt gtggttggag gtctttgagg 25200 agggctgtga cctgccctgg ttgggaaata agcactctgg ctgctgccag gagaagggtc 25260 tggtcttttg ggcagagggt gggggtggtg gcaggctcag gtgaaagctg gggaaggagc 25320 tgactccagg tgtttctgac ctccctctga aagtattctg gagcgcccat cccaatacag 25380 ccatacttag tgagtacaca cctgctccaa gagaacattg aaaagaataa aggtgaaatc 25440 aaccacattt tccagcaaat tttgcagtat tacaaattta tttgtacatt tacaaaggtg 25500 caaaaaagca tottgotttt gcaagaaata gtaacatcat toaatatgot ttottattta 25560 ctaaaacctt gaaataaaat tgtaaaacat cagtttgaag gcctgactct cagggtagtt 25620 cttttttaat tctgggtttt agtagctgtc acaaaaatat tggaggacca tgatcccact 25680 tgtgaatagc cataggactc cagcctggga agcatagcga aaatctgtgt ctaaaaaatg 25740 aaataaaagg atgaatttta tggtatgtaa attatatcta aattttaaaa aacagattcg 25800 aatatataat ctgctttcaa gtttttttaa atgtgtaggg atcagggttt tatcagtcaa 25860 atacattttt taccacaaaa ttcacatgtc aatgaaaaca ttctcaaact ttggttctaa 25920 aaaatgtttt ctttggcatg agttttcatt ccaagatgat tactttctca ttttttcatt 25980 gaaaggacat ctttaccttg aaggagcaga tgcaagaaaa gtacaattat ttttcaagct 26040 ttttcctgat tgcctaaaac agacagctct tgtcatctca aaagtgtcag cattttggtc 26100 tttaggaagg agggagcccg ggcgcagtgg ctcacgtctg taatcctaac actcgggagg 26160 ccaatgtggg cagatcattt gaggtcagga attcgagacc agcttgatca acatggaaat 26220 cccatctcta ctaaatatac aaaaattagc caggcatggt gccgtacacc tgtaatccca 26280 gcactttggg aggctgaggc gggcggatca tttgaggtca ggcgtttgag accaccctgg 26340 tcaacatggt gaaaccctgt ctctactgaa aagacaaaaa ttagccaggt gtggtggtgg 26400 gggcctataa tcccagctac tccggaggct gagacaggag aattgcttga acctggaggc 26460 ggaggttgca gggagccgag atcacatcac tgcctccagc ctgggtgaca gagcgagact 26520 ccctctcaaa aaaaagaagg agggaggtgg gagtgggggt gaggatttaa aaattaccta 26580 tcgggtacaa gctcattata tgggtattgg gttcactaga agcctaatct ccaccagtat 26640 gcagtctacc catgtaataa acaagcacat gtacccctga atctaaactt ttaaaaaaga 26700 atattcacag gaaaaaaaa gagttaatca cagggaagca gaaacagaca tacattaaaa 26760 attactgata aattttttaa aaataaggag ggagggccag gcacggtggc taacacctat 26820 aatcccagca ctttgggagg ccgaggtggg cggatcacga ggtcaggaga ttgagaccac 26880 cctggctaac acggtgaaat cccgtctcta ctaagaatac acaaaattag ccgggcttgg 26940 tggcgggcgc ctgtagcccc agctacttaa gaggctgagg caggagaatc acttgaaccc 27000 aggaggcgga ggttgcagtg agctgagatc acatcactgc actccagcct gggcgacaga 27060 gtgagactcc gtctaaaaat aaataaataa ataaggaggg agggaaagtc aagcagagag 27120 ggaggggaac ttggggcaac cctcttcggt attttgctat gaagataagt cattctgtgt 27180 ggctggaaag ttttcatggt ccacccaatc tccttaccaa gtatgggaaa gattctactg 27240 taatgccaca gtcttggctt tataacatta gcccactgat ggtctgcaac attctatgcc 27300 ctccaggctt ctacctcttc cctgcgctga ttagactgtg gatgagccaa tgagtgaggg 27360 gtaagggtga agccacctct gcaccctgat tcgtatccag aatccttttt taaaaaaccc 27420 tttctgagta gctattctat ctgtggttgc atttttaccg tttttcccat atgacatcgt 27480 ttttattaaa gaaggcattt actgttggca atatatcttg tctgctatat cttcccttta 27540 gtggctcaaa aaaaaaaaa ggaaagaaag aaagaagtgg tttgtgtatt tcattattgg 27600 aatagaacct ggcaaatacc ttcagctgag ccatgttggg aacatctgtg ctttcagcac 27660 actgcaaagc aaacctccca cactgggtaa tttgctctaa catgagtttc ttccaatctt 27720 cggcagtgtt ttctctacat ctttcgatgg tgtttgctga caaagaaatg cctttcggtt 27780 tgtcgacaga tcatttattg ttcattgttt ctgccatttt tcctgcagca gaaagaataa 27840 gtgtctgccc attggtagat gttttttgct tcatgctatc atgcaagaaa ctttaaaaga 27900 gctttccaaa tatttatcat tgcttaggga aataactaag aagtactggg ttgaacagca 27960 cagaacttta aacaccgctg ggaaaaaaac tgctcaggtt tctcttcggt tctgaaagct 28020 tagttttaga caccttgcca accatgagga tttcacactg ctgatgactt aatagctcca 28080 ggcaccaggc acccggggca aacttcagca gtaaccacag agtgggggaa attcaaagag 28140 ttttgtttgc tgatttttta ttttaggggc taacttctgg tcaggtctgt accctgagct 28200 cagccaagag taataaggaa ttctcagctc tcccttctgc tgtggttcac ctgctctgga 28260 tttctggtgt tcattgcaga ttccttacag gaatcttgtg tgagccactt ggccattttg 28320 ggggatgagt tcggttaata ccagatcata taagccgagc gcggtggctc acgccagtaa 28380 tcccagcact ttgggaggct gaggtgatcg gccatcacct gaggtcggga gttcaagacc 28440 agcctgacca acatggagaa attctgtgtc tactaaaaat acaaaattag ctgggcttgg 28500 tggcgcatgc ctgtaatccc agctactcag gaggctgagg caggagaatc attcgaaccc 28560 gggaggtgaa ggttttgaga tggtgccatt atactccagc ctggccaaca agagtgaaac 28620 tctgtctcaa aaaaaaaaa aaaacaagat catataatcc atcagtccac ttagacgcac 28680 taaactctaa tcctccgcaa tccgctgaaa gcgtgcaatc cagagtgggt attgcatcaa 28740 cccctggtct cgggcaccaa attcctttct tctgggacac cagagaactg cgtggggtgg 28800 tacctgcatg aagggtgaag gcgccagcat ggaacttgat attaaacatg agctcttggg 28860 gegeceactg eteaggetg tggcaaggea tatggegage tgageaaaca gtaggeacte 28920 aggagtgcct gacatccctt taaccaaacc ccaaggtcca ggtgagtttt gaagtacttg 28980 agtactgggc aggatgccca ggctgagcaa ctccctgtga gcaggggtat ctcactccct 29040 gcagagcaca gaccccagaa ggcaccacag gttcagtccc cagcagattc gaagccccct 29100 gcccatcgag ttcccttgaa cccctgcccc tgcacagatc cagtgattgg cacaggaagc 29160 ctccagatcc agcgagagga gcacactccg gcagcctctc gggaggactc aagggggatc 29220 ccagctgtgc cattctggcc tgggtgctga agttgcatct gatcgtgccc tggccccact 29280 ggttctagga acaggcetec ccaccaggtt agcagetgca taactggeet etgeceetag 29340 aggaagcctc cctgaatctc agcctcccag aggggctcca gaggccttcc ggaagctgtg 29400 tgggatttgc agttgcaccc cttcatctaa ggcggcccca gggtctactg accccagctg 29460 accattgact gccagtgcac acaccagacc ccaacaccaa caagcagctg gaagctcccc 29520 ttgatagaac cttgccactg gggctgccag tctttgctaa tgtgctggca tggtgcctgg 29580 gaaccagcca catggctctt gagctgccct tcaaggagga aacagaagtc ccctgtcaaa 29640 agatgaggcc accatccacc cttaacaggg aggtggccag gccctggtac cctgttctgg 29700

cactttcttt gttcaccaga tttgcaaatt tgttatcagc cagcacagtt tccccacctc 29760 cacccacct gtctgggctc cttagagtaa aggaaaattc tccccaagga gctgccttca 29820 gateteteca cacagattee tgacageagt ceetgeaatg gtttggttee acaggateat 29880 agaagctttt taaaattatt atttatgcaa aatatagaca aggaaagatg cgatttgact 29940 gcaccatgtg acagettett ggggatttga getgeetgee ggteeaatga accageegtg 30000 agetgetgee agaggetacg ggateetggg tggeagetga ggttggggaa geeaggaace 30060 catcttactc ccttgcaacc tgatgagetc atgctggaca caggcccagc tcgggactga 30120 acceptgtage cetetgegea cettgaacet tgeaccaggg tggtggggag getggggagg 30180 aggaggcatt cactgtgacc agtggggttg ctttatatgt ggatgtgttt atagctttta 30240 attttatttt attttattt atttttgaga cagggcctag ctctgtctcc caagcacgat 30360 ctcagctcac tgcaagctct gctttctggg ctcaagtgac ctcccaagta gctgggatta 30420 caggtgegea ccaccacac tggataattt ttgtactgtt tatagagaca aggttttgcc 30480 atgttgtgca ggcttgtctt gaactcttgg gcttaagcaa tgcacctgcc ttagcctccc 30540 aaagtgctgg gactgcaggc atgagccacc atgccccggc cagttttatt ttattttaa 30600 ttgataaata aaaattgtat atatttatgg ggtacaatgt gatgtttcaa tacatgtata 30660 cattgcggaa tgatcaagtc aggctaatta gcatatccgc ctcctcaaat atttattatt 30720 tetttgtaat gagaacattt aaaateeeat etttggetgg geatgatggt teaegeetgt 30780 aacctcagca ctttgggagg ccgaggagga cagatcacct gaggtcagga gttcgagacc 30840 agcctgacca acatggcgaa accccgtctc taataaaaat acaaaaatta gctgggcatg 30900 atggcacatg cttgtaatcc cagctactca ggaggctgag gcaggagaat cgcttgaacc 30960 caggaggtgg aggttgcagt gagccgagat aatgccattg ccctccagcc tgggtaacaa 31020 aagcaaaact ccatctcaaa aaaaaaaaaa aaaagtaaaa tctcatcttt cggctatttt 31080 taaatataca atacattatt atgaactata gtcaccttgc tatgcaatag aacagcagaa 31140 cttattcctc ctagtagctg taactttgta cctgttgacc aacctctccc cttccccgtt 31200 cacctcccct ctatgcctgg cttatttcac ttcctcttgg ttcatccatg ttgttgaaaa 31260 tgacagaatt tcctgttttt ataaagctga ctagtgttcc gttatgtaaa tacaccacgt 31320 qctaaaaatc catttacccq tttaqqaaca cttaggttgt ttccatatct cgactattgt 31380 aaataattgt gtcatgacca tggcagtgca gacatctctt ccgcatacag atttcaatcc 31440 tttgggtatg tacccagtag tggggttgct ggattatttg atacaggtaa ttctcttttt 31500 tttttttaga gataggatet eactatgttg teeaggetge tettgaacte etgaeetgaa 31560 gcagtccttc ctccttggtc tcctagagta gagggctgag attacaggca tgagccacaa 31620 cacctagccc tccaggtaat tctatattta gtcttttgag aaaccttcat actgttatcc 31680 aaaatggctg tactaatttg caatgttacc aacagtgtat aatggttccc ttttctccac 31740 atcettgtca acacttacta teetteatet tttttataac agecaateta acaggtgtga 31800 ggtgatatct cattgtggtt ttaatttgca tttctctgat gattagtgat attgagcact 31860 tttccatata actgttggcc atttgtatgt cttgttttga gaaatgtctg ttcaagtcct 31920 ttgccttttt aaaatagggt tatttgtttt ttattattga gtcatttgag ttccttgtat 31980 attttggata ttagcccttt accagtgtat gattcgcaaa tgtcttctcc caatctttga 32040 attgtctctt cacgctatta actgtttcca ttgctgttca gaagcttttt agtttgatgc 32100 aatacaattt gtctattttt gcttctgttg cctgtgcttt tggggtcata tccaagaaac 32160 ctctgcccag acccatggca tggagccttt gccctacgtt tcttctagta gttttatagt 32220 ttcaggtctt gcatttaagt ctttgagttg attttgtata aggggtaaga taaagtcccc 32280 ttttcattat tctgtatgtg gagatctagt ttttccaaaa ccatttatta agagaccgtt 32340 cttcccccat tgtccaagac caggtaaagt agcgcatgcc tgtaatccca gccctctgag 32400 aggecgaagt gggaggatea ettgaggeca ggagtttgag accagactag geaacatage 32460 aagccccatc tctgaaaaaa acaaaatttt tttttaatta gctcagcata gtggcatgca 32520 cctgtagtcc cagctactca ggaggctgag gcatgaggat tgccagagca caggagttca 32580 aggttacagt gagctatgat tgcatcactg cactctgacc ttttttatgc tctcttaagt 32640 gggattgttt tcttaatttc tttttcagac agttagttgt tagtataaag aaacactact 32700 gctttttgta agttgatttt gtatcctgga actttactga atttgtttat cagttctaat 32760 ggtttttggg ggtaactgtt taggatattt tatatataag atcatgtcag caaacacaga 32820 caatttcact tcatcctttc ctattaggat accttttatt tctttttctt gccgaattgc 32880 tetggetaag attteeagta eeatgtggaa eagageagge atcettgeet tgtteetgat 32940 cttagaggag aagctttcaa cttttcactg ttgagtacga tgttggctgt ggacttgtca 33000 tacatgatct tcactgagtt gaggaacatt ccttgcatac ctactttgtt gagagtgtct 33060 tttgttttgt tttgttttgt ttttttgag acggagtctt gctctgtcgc ccaggctgga 33120 gtgcagtggt gtgatctcgg ctcactgaaa gctctgcctc ccgggttcat gccattcttc 33180 ctcagcctcc cgagtagctg ggactacagg cacccaccac catgccagct aattttttt 33240 gtatttttgg tagagatggg gtttcatcgt gttagccagg aaggtctcaa tctcctgacc 33300 tegtgateca ecegeettgg ceteteaaag tgtgttgaga gtttttttt accatgaaag 33360 gattgaacta tgtcaaatgc tttttctgca tctattgaga tgaatatatg atttcttgtc 33420 cttcattcta atatggtgac tcacattgat cggcatatgt tgaaccaaac ttgcatccca 33480

gagataatet tittititt tittititti tittititgaa acaaatiete aeteigiege 33540 ccaggctgga gtacagtggc acaatattgg ctcactgcaa cctccgcctc ccaggttcaa 33600 gcaattctca tgcctcagcc accctagtag ctggggcttc aggcatgcac taccatgcct 33660 ggctaatttt tgtatcttta gtagagacag gaatttgcca tattgcccag gctggtctca 33720 aactcctgag ctcaagtgat ccgcccacct caacctcatg ctgggatcac aggcatgagc 33780 cattgcatcc ggcccatggt gaatgatctt tttaaggtac tggtgaatag ggttatctag 33840 tattttcttg aggatttttg catccatgtt catcaatgat atagcctgta cttattcctt 33900 cttgtagtgt ctttgtctgg cttggtatca gagtaagctg gccttgtaga atgagtttgg 33960 aagtatgctg tccccttcaa tttttgggaa gggcttgata agaattggtg ttagctcttc 34020 cttaaatatc tggtagaatt taaccatgaa gccatctcgt tctgggattt ttttgttggt 34080 ggtggtagac tcttaattac tgattcaatc ttcttattag ttattagtct gttcagattt 34140 ccaatttttt catgatccag tatttaggtt atatttctag gaatttatcc atttcttcta 34200 ggttgtgcaa tttgttggca tataattgct tatagtagtc tcttacgatc ctttgtattt 34260 ctgttatcaa tggtaacaac tcttctttca tctctgattt tatttgagtc ttcttttttc 34320 tttattaqtc taqctaacqq tttqtcaqtt ttqttcaqct ttttacaaac caactcttaq 34380 ttttgttgat ttttttctat tgtttttcta gtctctattt cattgatttc tgctctgatc 34440 tttgttattt ccttccttct gctaactttg accttaattt gttcttcttt ttctagttcc 34500 ttgaggcata atattagcct gtttatttga gatttttctt cttttttgat ataggcattt 34560 attgctataa acttccctct tagaactgct ttaggctggg tgtggtggtt catgtctgta 34620 atcccagcat tttgggaggc tgaggtgaga ggattgcttg aggccaggag tttgaaacca 34680 gcctgttcaa cacagtgaga ttccttctct acaaaaataa aaacaaatta tctgggtatg 34740 gtggcacctg cctgtagtcc cagctacttg ggaggctgag gtgggaggat tgcttgagcc 34800 caggagttca aggctacagt aagcagagat tgcgctgctg cattccagcc tgggcaacag 34860 agtgagaccc tatctcaaaa aacaaaacaa aacaaagctg cctttgctgc atcccatgca 34920 tttttgtata ttgtgcttcc attttttgtt catctcaaga tatttttaag tttacccttt 34980 aatttcttct ttgattcacc agttgttcag agaagcatat tgtttaattt ccacatattt 35040 gttaatttcc cataattcct tctgttattg atttctagtt tcataccact gtggttggaa 35100 aagatacttg atattatttc aatctttttc tgtttttttg agacagggtc ttgctctgtc 35160 accoaggttg gagtgtggtg gtgctgatca ccactcactg caacctcgaa ctcccaggct 35220 caagcaatcc teetgactca geeteectag gagetgggae tacaggeata cactaccatg 35280 tccagtgtct ctatgtggcc caggctggtc tcaaactcat gggctcaagt gatcctcacg 35340 cttcggtctt ccaaaatgtt gtgattatag aagtgagcca ctgtacctgg ccaatttcaa 35400 tcttcttaaa tttgttaaga cttattttgt agcctaatat acgacatacc ttgaagaatg 35460 ttttatgttc actcgagaag aatatgtatt atgttgcttt taggtggaac ggtctatata 35520 tatctgttag acccatttgg tctaaagtgt agttcgaatc ggatgtttcc ttattgactt 35580 tctgtttgga tctgttcaat gctgaaagtg aggaattgca attcactact attattatgt 35640 tgtagtctac gtctttcttc agatccctta aggtttgctt gtttggttgc ttgattgact 35700 gattgtaggg atggggtttt gctatggtac ccaggctggt ctcaaattcc tggcctcgag 35760 cagtectece teettggeet etcaaagtge tgagattgta ggeatgette atatatttag 35820 gtgctccaaa gttgggtgca catatatctg tacttgttat atcctcttga tgaattcacc 35880 actatagaat gtcactatac gatgactttg tctcttttta cagtttttcg cctaaagtat 35940 attitgtctg ggccaggcac agtggctcac acctgtaatc ccagcactit gggaggccaa 36000 ggtaggcaga tcacctaagg tcaggagttg gagaccagac tggccaaaat ggtgaaacgc 36060 tgtttctact aaaaatacaa aatttagcca ggcatggtgg tgcatacctg taatcccagc 36120 tactcgggag gctgaggcag gagaatccct tgaacctggg aggtggaggt tgcagtgagc 36180 tgagatcgca tcactgcacc ccagcttggg caacagagga agactccatc acacacaca 36240 acacacaca acacacaca aagtatattt tgtctgaaat aagtatagct acctctcttc 36300 tettettetat eccattigea tigaatatet tittetatee titteaetite agietatgag 36360 tgtcctttaa ggcaaagtga gtcttgtgta ggcaacatat gttgggtctt gttattttat 36420 ccatttagct actctgtgca tttgattgga gaatttaacc catttacact caaactaatt 36480 attgatagat aatgacttac tagtaccatt ttgttcatta ttttctgggt attttgtaga 36540 tettttgtee etttetteet ettgettttt tteetttgtg atttgatgge tttetataet 36600 gctatgcttg ggatctgttc tttttctctg ttgtgtatct attataggct tttgctttgt 36660 ggttacccta aggcatacat aagccatctt atacttaact ggttatttta agttgacaac 36720 aacttaactt tgattgcaca tataaactct acacttttac ttctcctcct cccattctat 36780 qtttttqtqt cacactttac atctttttac aatttttatc ttttaacaaa tcactqtqqc 36840 tctagttqtt tttaagtttt accttttaac ctttgtactg gagatataaa tgatttacct 36900 gctgccatta tggtgttaga gtgttttgga tttgacaatg tacttacttt taccaatgag 36960 ttttatactt tcatatgttt tcatattact actaattaac atcctcttcc ttcagcttga 37020 aaaactcctt ttagcatttc ttgtaaagca ggtctaaaac aaaaaccctc tcagtttttg 37080 tctgagaaag tctttctcac accttcattt tttagagaca gaattgctgg gtatagtatt 37140 attagttggc ttttttcttc ctttcaggat tttgaatgta tcatcccact cccttatggc 37200 ctgcaaggtt tctgttgaga agtatactga tagtcatatg ggggttccct tatacatgat 37260

gattcacttt tecettgttg etttcaatat tetttttaae taetgacaat tegattacaa 37320 tgtgtcttgg tgtggatctc tttggattca tcttatctgg catcctctgg gcttcctgga 37380 tctggctttc tatttcattc cctaggcttg caatgttttc tgccattatt tctttgaata 37440 tgtattctat ccctttctct ccctttcttc ttctggcatg ccaataatgc ataagttgtt 37500 aagctatctt caatcctttt cattcttttt gcttctcata ttagataatt tccagtggcc 37560 tgtctttgaa tttataaatt ctttcttctg tgtgatctag gctgctgttt atgctctttt 37620 tcagttcagt tatagtattc ttcagcgcta tgatttctgt ttagtacttt aatttctgtc 37680 tgtttgttga aattctcagt ttgtttttgt attgctctcc tgaccttggt gagcatgtct 37740 atgaccgtta ttttgaattc agttaaatca catatctcca cttcacttgg atttgttctt 37800 cactggagat tegtattgtt cetttatttg gaatateate eegtttette atttteettg 37860 actctctgtg ttggtctctt tgggttagat aggacaacta cttccctcag tcttgtgaga 37920 ctggcctcat gtagaagaat ctcgccaatc catttaacct gggattttaa gatgtccctc 37980 aaatetttgt gtttgtccag actgctacct ctgtttgcgg tggcccccta gagettggga 38040 tgtactacat catgttagta cctaatacca gtgagatggc agccagactc tctagatgta 38100 gctggaaagg ttgggtgttg gatatgtgtt ccagttcctt ctatctttac agtgaagctg 38160 agtgcaggca tttgtctccc actttctctg cattaatctg gggataaaat ctgtggcaaa 38220 tgcctgcaca ggcatttgta caggctgcat tctttgatcc tggggagata gctgctgaca 38280 ttgggcccac ctctttgttt tttgtggtct agggccactc aagaatgcaa agccccattg 38340 agteccagag etggtaatta aaaacgeagt eeettagetg ggagetatag aagttetgge 38400 acttggcact tggccaaact cctttcatga agaatgggta agcctggatt tatcaccagg 38460 gtgagcccga gagaaggctt atgaagcacc aagctctggt tccagctgtc gaagggctcc 38520 tgttctgttc cattgcccag ttagctgctt tatgcaagtt catttagaag gcagaccgtc 38580 aagtagccac tggaagtgtg taccgagagc ctctcctgga gagcgaatgg gaactgcaca 38640 ttcctgcctc tttctgcact gctccaaggg ggtgtacccc atggaagtgt ttacacactc 38700 atctaaaacc accactttgt tctgtgatca aggagactca catatacctg gtcccttctg 38760 ttcacagagc taggaggttt aggatggagt cctttgggag gtagctgtaa aagttgggga 38820 actcaatttt tggtataaac cctttccagg gacaaagagg gggctgtgtt tttttaagcc 38880 ccttctctgt gctgctcctg ggggatgaag accctggaag tgtttgttgc acctgtataa 38940 aaatgctgct ttcttcctgt ggtctagaga gacacattca tgccagtccc ctttgccccc 39000 agagctagga ggtttaggat gcagtctttc aagtggaagc tgtaaaagtt ggggtgctct 39060 atctgaggga gaaacagggg gccgctcttt ttaagcccct tctctgtact gttcccagag 39120 gataaagcca ctggaagtgc ttgtatgccc gtatgaaact gctgctttat tcctgtggtc 39180 tagagagact catatgcgtc taatctctgc tcccagagct ggtgaaataa gagccaaact 39240 gtggggaact ttagagttag ggtgctatat ttaaggccca aacceteete tecacaggga 39300 gaaggaagct ggggtgattc cttcccagct gggtggtgag gtgcccgggg ccatgcccga 39360 atatgcctcc actctcctaa ccattcaaaa tgactttctc cgttgctcaa tgggtaggag 39420 tctcaactgg tctctgattt tgtcttgagg aaactgacct gtgaatagac ctatctggtg 39480 catttctggg tcggggggaga ttcaggagct tcctattcca ccatgctgct tgaggttggt 39540 ttatttctgc tacagcagag tgtaccggct gtcagggagc aggttggcct gagtcagtga 39600 cacagagtaa aataagccac acttgatagt gggggagtag gaatggccag gggaacatgt 39660 gggatagcac ctctaagatg ggctgcaaac aagtgagggc tgagaacccc caacccaagc 39720 agatggaaag gaggccccag agagaagccc caacatgagc cacaacccat gtcacatgaa 39780 cagcagtagg gacaaaaagg ggtatttggc ttggacaaga gaaggaaact gtggctcacc 39840 ttggaccata tgaagaggag tcacagggca ggggtcacac caggacacta ggatgtggat 39900 tectgeteat tetaaggaet etgegggaaa ggeeaggtea ggaeacaget aaggttgtee 39960 ccaagaggaa ggggtcttga gaagtcgcag ttcctgcccc tcatggtttt ccaggcaaag 40020 ctgagtgtcc gcctgatgga ggctgcagag aagagctgct cttctcagac ggggatgaag 40080 tgcacagctt gccaagggct cagtcagtta tgtgccatct atcgtggact ccaaaatgca 40140 gtgacaagtg agcttataga gcaagggctt ccttggggtg catgggctga gttttccatt 40200 gtcctgaaac cttctataag caataggaag aaactataga tggcatgatc agtggcctag 40260 gttcttctcc ataaagtcct cccaacgaca gcctcttatg gatcaattgc tgtgcagtga 40320 cttagacccg ggagggccag ctgctgactc caaagcctaa agggtctcag cttctcaaga 40380 agcccccttc ggccaggcac ggtggctcat gccataatcc cagcactttg ggaggccgag 40440 gtgggaggat cacctgaggt caggagttcg agaccagcct ggctaacatg gtgaaacccc 40500 gtttctacta aaaatacaaa aaattagcca gggtgctggt gtgcacctgt aatcccagct 40560 actcaggggg ctgagacagg aaaatccctt gaatccggga ggcagacgtt gcagtgagcc 40620 gagatcacac cattgcactc cagcttgggc aacaagagtg gaactccatc tcaaaaaaaa 40680 aaaaaaaaga agaagcctac cctgcaggct gtagagagct gatggaagtg tcctgtggcc 40740 ccttgcaagg ggagcaggaa ggggaacatg ctaattgaaa caaaaacaga ttacagtccc 40800 ttctgcttct taatggatgg tagacagtga aattcatatc tataaaaata accctctgca 40860 gtctcactgg tacagaggct gtggggatgg gagaaggaaa gctggactct tgagccctgt 40920 cctgccctgt cctgctgctg aatgtccttg agagcccacc catggggaca gagacagtgc 40980 tcagcctctg gacaagccca gagcaggcag ggggaaaggg aaactactct ttataatcag 41040

teetgggaaa gtgggtteet geaaceaget teagggagag gggaggaget eageaggggg 41100 agggaggaga gaaagagaga cagcagatct cagcagctga tgggccacac cccctttggc 41160 accccgaaac ttcagcaaag gctgtggccc acccaggatt gtgtgggtgg gacccgggga 41220 agaaatgaat tagggtgctg cccccatggg gggcatggag gtgggaaaga accagcccac 41280 ccaaggggcc atgtggagaa acccaatctc ccccgcaga acctgccccc agaggcattc 41340 gcatatgaag gactctgggc ttccatccta tttggaaatt taaaaatttt cagccattta 41400 aaaatactgt atctatggca cttaccagct gagccccccc agggtcctgg acatcagggc 41460 cagcatagaa acaaccatag ggatggtggg aacttaaatc caggctccct ggagctagtt 41520 agaatgacct ggggctcagg gctgttcagt ggcaccagat gccatgtgcc ccttcctggg 41580 tatcccagaa atcccagggc cactaagctg ggctcagccc ccgcattcac caatgtcccc 41640 tetttggece taggatggga agettgggea caaacceace tetetgetgg etteaaatee 41700 ttcctgaatc tgtacagagg tggcacccac agggccccca gggctgaggg gcacccccaa 41760 catectagge cetgagaact etgaggeaag etegeageeg aggeggggga getgtgeaga 41820 cctggggagg aaacaggggg caggcatgcc gatccttcat cgtggcagct gcaagccagc 41880 gettgggeae eegteacete teatetgetg atggeaacae tggagaeeat agagggetee 41940 tecettgeea aggteaceag geagtaacee etgggeteaa gteetgetea caaagetgtg 42000 gatggcagaa ccaggacctg gtgcagaggc tagcccctga ggatactgat ggggacagca 42060 tegeetgetg aaetttggta eacaggtgaa taeetggaaa attttttet teteaggttt 42120 ttttggtttg tttgtttgtt ttttgaggca gggtctcact cgcacccaag ctggagtgca 42180 gtagegeaac catggetete tgeaacetet geeteecagg eteaagtgat eeteecacet 42240 cagcetecca agtaggtggg tetteagggg catgecacca egeceageta attittgtat 42300 ttttttcaga gatgcggttt tgcccgtatt gcctaggctg gtatctaact cctggactca 42360 agcgatccac ctgcctcagc ctcccaaact cctgggatta caggcctgag ccacctcact 42420 cggctggatg cccggaagtt taagcatagc tgtaaaccat cccagctcct ttatttccct 42480 gcttggccga agattgcttt ctgtcatccc agtgagctgt gccctgtttg tgggagaacc 42540 tgccctcagg gatggatgga accagcccag caacaaccca cccctcagcc acttctagaa 42600 tcacccagga agggccttca cagccaggct gatgtcccct cactgaacac aagggcaacg 42660 gaggecaggt gggtagetat getgagetea tteacattee tegaceceag tagaateaca 42720 gtcatcgaca gcccaatgtg gatcctagga cggggcctgg tagacaaaga gatggctggg 42780 actatgcage gtgcctggte teccagegga acaegtgatg caeeceatget gacaeetget 42840 gacacctgag ctccacaaga ccctgacatg agcagtgtgg ccttgggggc gtgtggcctt 42900 gggggcatgt ggcccatctg ttaaaggggc tcctgccact ctgtccatct cactgggtta 42960 cggtggggat gctcctaggg cccgtctgaa aaagcagttt gggaactagc aggtgacaca 43020 cagtgctgct gggcatcagg ccacttgctc tggaccagcc tggaagccag gaacctcatg 43080 tettgteeca ggeaceteee tgeaceegte eteactgeat ceteageagg acacagagag 43140 aaggggcctg gccccaggag tgtcccagcc tcattgcatt tcctgagctg ggcagaaggg 43200 acceptgtet gttggetttg etggetgete accepaagg etceeetgat getgaggeet 43260 cccctaagcc ggtgtggaca caggagggat tggtggtggg taaagctggg aaactgcagg 43320 agcccggggt gagggcaaga gggctaggcc tgcagatccc agttccaacc aggatcccag 43380 atcagagggg cggggtgggc ctcggggtat ggagggtccc aaacaccagg ccccacccag 43440 gagggtggca ggaagaggac tgttgtactg ctccagctgc ccaaggacac gtgtgtgccc 43500 ageteaggat gaaaggtetg gaaacggeae etecatgggg cetggggtee tecaaggage 43560 acgctgtgaa ggagecettg acaggcaget etgageeggg eteggtgeee aggaetgage 43620 ctctqcaqtc ttccctqaca cctcqqaacc caqtgtcagc tgcctgcaga ctgcgaggaa 43680 gggccccgcc ccatcccgga ctggccactc ccgtgggtat ccttctcagt tccagcctcc 43740 tccqcaqqqc cacqcatqqc tqtcctqccc aaqqctccaa taagaaggac tttttaaagg 43800 tctctcaagg ctggggacag ggtgcaggca ggcgttgtct gagcagaatg acaagagctg 43860 ggctggcaag agatttgcca cttccattca tgagatgggg atggccacac cgggtggtgc 43920 ccagggaggg gttaacccct ctaggccacc cccaaaggaa gaataacaga cctgggagga 43980 agggcaggtg cctgctggtc cccctcaatt cagactcggg atccctgagt ggggctgccc 44040 agtaggataa tecececace eetgeegeee etecatgate aggeagggee ageeggeage 44100 etecageetg ggeageacte cetgeetetg tecaceetee teatgeeagg ageetaceat 44160 tectaceagt ceteteettt etgeaceeca gaageetgte tecacaetgg aggagagget 44220 gagatgtcct gtgggtcagc ctcacctcca tgtaagtgtg gatcgctatc cccttctcca 44280 gggaggctga ggccaagggc caggctaaga caaggcagaa gtttctccta cttcagactt 44340 gcaggggtca taagccccag catcaccctg gaatgcgggt caccaggcca tgaggctgaa 44400 ctaggggtgc cccagaactg ggcaagaagc cctgggtgag gctttggggg agggcggctg 44460 ggccagggaa gtactgtcgg ttggtggaaa agatagaaga gtccaggaag gctggacaca 44520 ggcggccaag ccagggcgac caggagacaa gaaggtcctc tccagggtcc cggttgtgct 44580 aagtgeeeta geeteeetge agagggetet eteeagetee geetgeeetg gggaeeegtg 44640 aagaggccaa ggcaacagtg cagtgattta ttgaccagac tttgcagcaa gaacacagcg 44700 aaggtggggc ccgtacaatc cagcctggca gagggtctgg cccccttaga gcagaatctg 44760 gggaccccag tatatttccc tcacagcccc ccaaagtcca gcctcaccct gctccaggcc 44820 cctcctgaag tgagggcag cagggggacc gggtcctgga ggggctggaa ggcaggtggt 44880 gcccagagcg gggctggcac cgggtgcatg cctgccccgg tagccagcag gaggtgattc 44940 gtgeggggge agtggggggg tgeaggeggg cagecagget caccacaegg aacaettgtg 45000 ggcagggttc atgggtgagt ccttgggaca gtggaaagcc cggccaaact cctcaaactg 45060 ggacacactg cccagcaccc tggggtgggg agagacccac acagtgtggg gccctgcagc 45120 cactccagcc ccagcaacca ggggtgactt ttattccttc ccatgccccc tgatcccacc 45180 ccaaacacaa ggagtggaca aggccaggcg ggcaggtggg catacctgta gtgctcaggg 45240 gcatgcttgt cagtcagcac ctgcaggtag atggactgcg accgccgctt gatgcaccag 45300 ttctgggtcc aggageggg tggaggggag gagggggata tgaacccagg catctgcccc 45360 cttgccccc acccagcaca caaggcggta ggccccctca gcaccacagg accatcacct 45420 ctgacgggac aggtgatgac agacaggctg tccatgcgaa gcctgggcaa ggcaggactg 45480 ggactgaccc tggatgccgt gtccccaccc caaggctccc agtccaatcc cccacccagc 45540 ccacctgggc aaaggcaatg aagaagagct ggtcatgtgt gtacttgagc cggggaagtg 45600 ggtgctctgg gccgtgctcc cgcacccact tctgataggc ctggggacac agagagcatg 45660 gacctgctat gcccgcccac cctgggcacc gcttcttctc tgtcctccat ctaggtagcc 45720 ctccctgctc tccctgtgaa ggggggcccg tgaatccttc ctcttccagt ggaccgtggc 45780 cccagcacat gccctgcccc accccaggcc agagctcagc agggtgggca gggagaggca 45840 getetgtece teatetggag teeteateag eeceegteee teetgeagea ggggtggage 45900 acaggcaggc cgctcacgtg gtaggccagc ttgaggccgc ccatatctgc gatgtgttct 45960 ggcccagctg gcctccctca ggcattgata ccctgggccc cagcccctaa ttcctaccac 46080 ccctctcctt cccttgccca gagagtttga gggggggctc caaccctact ctttcctccc 46140 aacccgcttg tcctccgtaa gtctgcggac actcattatc tgtccacgtg agtgtgcgtg 46200 ggaaccgaat gtgtgtgcag ggacctgggc acaggttttg tttggacatg tgcacgtgcg 46260 caagggtgtg cgtgatgctc ccggcccgtg ccccaccagg cctgagggcc acaaggggca 46320 ggtgggggtc tcacccgctg gttgtagaca gtgaagttgt catagagacg gacgatgcac 46380 tcagcctttc gcaggaagcg gctgtaggag gcctccgtcc accagtgcag caggttccct 46440 gagcggtcat actggccccc tgtgggcagt gcagcaggct gagacccacc ctcacctgag 46500 cccctcccc tccccacca ccagccccag ttaggccatc ccctaccctg cctctccact 46560 gcctgtcctg cccctccgg gccatccct ggggccccaa caggcctcac cccagtcgtc 46620 gtagccgtgg gtcagctcat gtccaatgat ggtgccgatg cccccgtagt tgagagacct 46680 gggcccacag cagcagcatc aggccctagc cctccaccct ctgagagccc catgctgctg 46740 cccaggcccc agatgtcccc tggccgggcc aggaggtggc ccagggaggc cacagaggca 46800 tccgtgcggt ccaggggcac atgtgcctca gcttcctcat gcgctatgtg aatgccagtg 46860 gaacctatcc agcttctttt aggaaatcac atctaacaga gctggctggg cagtgaaaca 46920 gggctggagg agacaggagg gaaacggagg cacctacgta ggggtttctc ctcctacctc 46980 atcattagtg ttgcgccacc tttgaaacat caaaatgagc ctcaaacaag taaagaagac 47040 cccaggaagt tacaaataac aaacctacac atttttctaa ataaccaagg atgtagtggg 47100 gagccagggt ccacagctgt cctgactcct gaacccagct gggtctgggg cgattggagc 47160 cacagtacgc cgacacacac ctggtagaca aggtctgcaa tgccagccct gccctcagcc 47220 acaaacaggg caagctatgt actcactgtg ggaagtcagg gtcgtacagg gtgggctgca 47280 qqatqcccqc qggqaacact acaagaaggg ggtgctcagt gggaaaccca tccactttcg 47340 qaccetqccc cgcccqgcqt agggacacat ccccttaccc atctggttct tgttgggtag 47400 atagtaggca ttgagcgcct gtgggggag cagccacctg tggagggatg ctggggtgaa 47460 tgqqqqqaac acactccctc cccqctacc ctcacatcac agcttcctcg tcagccatct 47520 cctgacagtt tgggggtcac cctgccggcc cccaccccat gccctgtgct ggcgtgtgt 47580 cccccatat ctgcatggct gtgagacgat ttgccctacc agetcctgcc ctttccccac 47640 aaccettece tgaceecag etetgggeea ggeacecaeg tggacttgte caceteetge 47700 cgaatcttct taactgagag ctggatgctg aagcggatgc tgttcaagat gttcttgaag 47760 taggtettet catggacete aaactgeagg aggeaeggge gaeaeteage ggeaggeeag 47820 ggcagggcta cctgcagact gggcaacaac ctggccgtgc aggccacctg ccctcctgag 47880 tgccgttagt agaggggtg tggacaggct gggcaggcag ggtcagggcc cacctcatac 47940 tccttgtcca cagcatcggg tttcagcagg aagtccgggt agccgaccat caccatcatg 48000 tactggagct gegggeegag ggeaggtgaa ggtggeacea ggeeteggga gaeageeeec 48060 cgcccccac cctacccacc aaggaaggga gcactaggcc agcctgggag tgggcttcac 48120 agttggggag gcaggcctgg tcaactccac gaaggcctct ttgtcccttt tgttctcttt 48180 cgctggtaca cagtaggtgc tcaatatata tgggaccaac caatgacact gggtcccccc 48240 tcaccttggc ccgagcagca gccctggtct cggcgtccat ccagtccagc tcctccaggc 48300 gctggcccag gatgtacttg atgtcttcca ctagctgctg cacctgcagg gtcaggggtc 48360 agggagcaag ggtcaaccca gcagcctggt ctatcactcc tggcaggagg ggtacccctg 48420 cctttaagca ccactttcta agcccaaacc tcatttctga acaccaagag gatactttgg 48480 aggtgaggat ccaggccetg cacccccgag ggctcacaag atagaggagg aaactgcccc 48540 agcaatgacc acagacatcc ctaaggccac gcctcccgag catgcctgag aaggtgggct 48600

```
ggggcctggc agggaggtct gcctgcagtt gatagtccac ataagcttcc tggaggagga 48660
ggcctgtgga ggagcagcct ggggcctcag aatcggctga gtacttagca gggcctggtc 48720
eccetgeetg caggggaeat gtggggetee ceatattagg accatggeet egggaggget 48780
ccaccetcag ttcagcacca tectectete tcaaacaagg gcaacceace ttggetttge 48840
tggcagctga gaagtgctca tgtacaaaga gggcgccaag cgccatgcca aagtggcgat 48900
tggcctggcc caagcagacc cgggccagct cctgtggctt gtcgctgccc tccatctcct 48960
gtgccagete gtgcagtgce teaeggaatg geggggaeag gtgtteaete aggaeeaeea 49020
ccacgcgcca caccaggtag ttgtgcagga ccctggggac caggtgaagc cagtgggtgt 49080
ccagacggac atgcatgtgg gccaccaagg gcaccacccc tacctgtgcc cgccaacctg 49140
tggctggacc caggacccag acagccccac aaagaaggga cagggggtca tcccagctat 49200
gcagagcaga aaatgtaaag cccacccagc atagaggtcc agggtgcagg ggaaggacct 49260
agtgaccgct gggcagaaaa tgccagatct gcagccatac cggtggggtg tggagcggat 49320
gagetgegae acetgetgea tgtagtetgt egecageage aceaecteet etteetetga 49380
gaagteetee tggaagatet ggtetageag ceaetteeae egeaaetgtg agaecaagga 49440
gcagcgaggg gacatgagag tccatggcca aggaacggtt tgcccatctc tggggagaga 49560
tgaccctgta gtcccagcag cagcattgcc ctcaaccctg cctgcccacg aggactgggc 49620
cacactcacg tggggggtga tcttctgcag ctgccccagc gtcaccttgt tgtacatgga 49680
gctgacatct cgccgtaggt cgtcatactc tgacacagtg atctgtgggg agagatcaca 49740
gctgacccag ccctgctcca tgatgccctc cctcaagccc agggcagcct ccagtcctgg 49800
tetgeteacg ttggccaget getgetecae ttgcaggate tettgggcet tetgttecae 49860
agogtotgoa cocaggaggo tgagoactog otocatgaac accotgtatg otgocaggat 49920
ctgcaccagg ggagggggct cacccaggga cagggacagg cctagcctgg atccaccct 49980
cctggggccc caggccttc
                                                               49999
```

<210> 20 <211> 49999 <212> DNA <213> Homo sapiens

<400> 20 cetgeeteec cateceatge eccageacet teteactgte etcateetga gegaggtaca 60 gggtcctctc tggcagggtg agcccatcct ggtcaatctg gggagggaga caggggccac 120 aggtcagagg cccacacctc aggttcccta aacagaggga attcccactc caatgcccag 180 agagcaacca gacatccatg agtacagcca cagaagcacg cagaccccag ctcctcttc 240 cacccagaçg agatggccaa agccccatcc ctgactgtcc cagcctgcgg atgcccaatc 300 ttacccctgt acgtctgcac tttccttatc tgtccggggc attcgtaggt cccccactga 360 cagttgggac ccctagcttt ggggccagct ccagacctcg cggagacgtc aacccagccc 420 geeggegege etetecetee tggeeeteae tgeetgeeag agggetggga aattgegget 480 cccgcggctc ctctaaacac cgcaattacc ccagggaaat tacttgcgcc ctcctcccgc 540 getetgeete tgtgegetee ceteceetee ceteteetge tegtetette cetectetee 600 teteaegeae eegeeteeeg egegeaggga eecetgggea aggeeaetge geeeeggate 660 cgcggccgct ggcagggcgc tcagggggcg cactcacgcg gatgacgtag cgcgaggagt 720 tectgtegte caggetgaee gtgagegaga agagegegge ggegetgtae aegeeetgeg 780 cettgtacag cageeggttg aggteecate gegeegegae ceeeggaege teeteegege 840 cgcccaggtc ccagcccccg cagtcctcga tgacctctag catgggtcgc gggcccagtc 900 gctcgatctc gcgcatgtcg aggcacgagc ggaagaaggc gcgcaccttg cgctgggccg 960 cgccgccagg cccaccccg ggccgcgcca gcaggcgccg taggctcctc gttttgctcg 1020 ccgatggccg cgatggtgcc ataggtgagc ttgtcgtcgg ggatggcgtg gcgccgcagc 1080 caaccgccgc aggcaacgag tagaagtcct ggcatgggtc gatgctggcg tccaggttgg 1140 cggccaggaa gcgagcggcg cgcgcgaagg ccttgcgctc agggcagccc tcgggacagg 1200 cgccgccgcc ggccgcgacc gggcccaggt acttgagggc cagcatagcc gccagaatgg 1260 cgcagaggcc ggcggcgaac accagccccg acagcaggca cacctcgcgc cggttccagc 1320 geggeageee ggaeegggee eeggtggege tgegegeaeg eecaaeggga ageeeggggg 1380 cagggaggcc ccgcgcgcc cccccgcgcc gaacggcttc acgttacttt gaacctcttt 1440 gggaacttca teegtagttg eggeeggtea ageggaatta eggggggget teeattggeg 1500 gcccgaaggc ccgccggcgg gttgcaagaa ccttggggcc aaacttgggg gctaacgggg 1560 gggccccttt aaaaaaaaaa aaaaaaaaaa acgtacttga cctcttggaa ctcatcgtac 1680 tgcgccgtca gcgaatacgg gggctccatg gcgccgaggc cgccgcggtg cagacctggg 1740 ccacctgggc tacgggatgc gcgtggccgc cggcctcctc gtgggcctcc gcatggccct 1800 ggggccgcag ctgcgggaag ggcggaagca ggctcaggag gcgccgcagc cggatggggc 1860 tcagggtcac cgcgaggagg gacacaggcc tgggtgcaga ggccccagcc gcgggcctca 1920 ttcactgcgg aaaccaggga ctatgagggt tcggcggggc caccacccc gggtgcacag 1980 tggagtette ecceetgtee ecteeetgea cacaettgag ggeegeaggg ttgggaggge 2040 tettattgga ageaagagge geeaggeaag gggeetggea egtagtggge etteattgaa 2100 aggtcgtccc tcttcccctt cgcccttctc ttccacgacc tgccccagcc aaggccgggt 2160 ggagtggggg aagaagcgga ggctggagtg aggaggtgcg gtcaggggcg cgtctatgcg 2220 acactttcag ctctccgcgc tggacccaga cagacgctcc gcaaagcggc caaagaacca 2280 aactttgtcc tegeggaagt cegegggate gaccaegeca acceegetee etggeteett 2340 etgeteggtg geeggaegge ceaetegeee ettecetagg ggegegege aacgeeceag 2400 ggtggcggac acacaaccca cccactggac ggccctgatg gagaacccga gacgggttcc 2460 ctcccccac tcccaccatc tctgtccccg ccccgagcca ctcctggctt caacaggttc 2520 tccccagaac ccaaacttgg gcgaagtttc accccggcg gggagcgagc tggctggcga 2580 cccccgagcc ccggcgccgt gcggcgcagt ccgcggagcc cgagagccga gcccgggagc 2640 cgcagccgca gccgcagccg cagccggagc cgcagccgag aggacgcaga caaagccggg 2700 aggeteegeg eagtggegge ggeggegaeg gaagtggeeg egatggtgge eteageggea 2760 gggacteggg egecaettae eeggeaggtg egegeeegag eeggeggtga eegagegggt 2820 cgggcccgag cgggggcctg agccgcagcg cagccgagcg ggcgtccggt gtctcccagc 2880 geoegeegee teetetgeeg eegegeegag eeegeegege egeeegeetg eeggeeegag 2940 ggagggggcg cgccggcgc tecaccetec tecgcccgcc ccgcgcgccc etcettecte 3000 ctgcatctct cgggccacct ggcagtgggg cggcagcgcg gacgtgggtc ggcggccgcg 3060 gagacagget ecegggggte gtgegggge tgeggteggg gaeteegggt ecageegegt 3120 tccgagacga gtgagggcag cgagtactcc cgtgaagggt cccctccgat ccagtgtccc 3180 cactcccage cgcccaccag ccggctggaa aggggctgga gctggagatg aggagccgag 3240 gactecteeg aagggetggg ggeggtgtea gtagtgeetg tgtetgeegg cacagteeet 3300 ggcgcagagc gcaccttcac taaccggctt ttttgtcctc cttggaaccc ctgccctgga 3360 tgggctctcc actagggctt ctggttggcc tcgctccctt cacctagccc ctggtgaagg 3420 gageteageg gggaeteetg eaagaagagg gettgeegee eeetteeeca teeteecag 3480 ccttgggtgg ccctggcacc acggctcagg gagtccctgg cccaggtagg aagaaaaggc 3540 caagagaaga atgagcgaag tetecetget ggagceaggg aaggetggag cetgeecect 3600 ctggccagca gccctaggcc tcagacaggc cctgagcctc aagaccctgg tatgtggact 3660 gatgggaggg caggctgggt gcagggactc tgaatttact caccgcctgc cttcttccag 3720 gtaaactggc tttttaaatg tggggcctcc ccactgcctg gaggcaaagc cctattctac 3780 ctgcctgcct gccttggcca gacagcctgg ccctaatggg acacagagaa cttggggctc 3840 cttggaagac tgatactgtt tctggagtct ctgctttctc tgccctaccc tgcctctggt 3900 gtototagoa ggagaccoot caaagcacca gccctcccag gtotgccggc tccagcccgt 3960 aggattggct taaacaatgt gtgagagcca tggagcacca tctaataaaa atcacaacaa 4020 ggtagggact ctgataacct acccatcatc ctgttctcct cctcagggtc tgtgcatctg 4080 cccagetect gagecetgge cetgagtgee ggeetetgee ectgtettge etetecetge 4140 ctcttcatct ctccatctct aagcccccac tccggatacc ctgcctccat ctctggccac 4200 cccagggttg tectetgeec catgeatect tettgggtee tattaattet aaagaggaaa 4260 aatggaatta cttataatgt ggcgattcca tgaagggggg aggggagggc agggaggtgg 4320 caaagtggct ctttgtgctt ttaatctgca tttttccctc aatgttcccg tctccaggag 4380 gataattttc cagccttttc aggccctgat tggtatcatt tctccagcaa ggacagcttt 4440 tattttcccc gaaatgaatg ccatgaaatt tccaagaaat gtaaaaatgg atattgtctc 4500 agagageete tteegacaga aaggeacaga ggeaaacaeg etteeetagg gaetettetg 4560 ctccagtccc gggggtgggg tggggggcac cccccaggcc ctcattctct cctccctcct 4620 tttgccctcc ctcatccctt cctcctccct cccgggtcag ctctgggacc ccccttccag 4680 ccaccetete ceagateage tgetattggt etgeteatgg geeteeegae teeetgeegg 4740 gcgacctgcc tggctccacc tcaccttttc ttttcacatc gcatccccca gccccgggct 4800 gagagcagca accagggcct acaggagttg acttggaatt gggccctctg acccctcagt 4860 cctggccacc ccacacagac tgccaataaa gagaagtcag aggcccacct ccttgactct 4920 ccggcacctt ctctgtaagg gaagctggca ctgtagggga gtaggcacca gtggtctggc 4980 ctgtagettg ctcactettt tgggggatet ettectacee etaattacea agatgaceee 5040 atgactcatg agaaagagaa tgacaggcca cagtggtgcc cagctaaacc cagccaagcc 5100 ctgagtgagg cagctgggtg cccagcttca gggagcagtt gggtgctgcc agagctgcct 5160 tggagagaaa aggcccgagg ggatgcaagg gggcagagat gaggggttca gaacctgact 5220 ctctgtctcc tccttgacca agggtagatc ccagcaactc tgccgaacag ggcatcactt 5280 ggtttgggtt ctggacatag agccctccct gaggacagtg tgctgtcacc agtagcttgc 5340 atctgttgca cgttcaccat gtgggctgct aagtgccctg ctctgaggtg gggctgccca 5400 cctaacgccg ggcctggtcc tgactggagc ccatttgtgg tcggacccgc ctctctcctg 5460 eggeetgeac gtgggtgggg atgaacceet tgeeetgeet eggtgtgetg cageagggtg 5520 tragetroag gargagerer greagertre accetytrea accaggeret actretrer 5580 tgcagatctg tggtatcttc tgagccctaa aaacacgcct ccagccagct tcctgtcctc 5640

cacceggeet eteggggete ateccateta ttatteacag cacaaaatgg atttttaatt 5700 tgagaaatga aatgactctc ccaagtggcc ggggtggcag ggagggggtg gaggaaggcc 5760 ggagccgccg tggccgccac agccgccacg gtgctgactc aggttcatct tggaaagctc 5820 ggggcccaca gccgaactga gagaccccaa aggcccagta ccccaccact ctgccccagg 5880 cctccactcc tccccattgc tgtgaccagg tggggtgacg ggtgcccgtt ggtcctgcct 5940 gageeteeag tggggeetae etetggeagg geggtegggg ggaeagetgg atetgteete 6000 cactggcttt cagattcctg tgcctcaagg gcagcccttg ggctccctgg cctggcctat 6060 cacctcccca caccccccgg ccctcctggc ctggcttcct ccaccctgtc cagacctctg 6120 gctgagctcc tttgctaggt cctgacccca cactaggccc actccggcct cgactgctgg 6180 cactggcctc cgctgctgga cacctggcct ccactccggc ctccacggca gaacccctcc 6240 tcacccctca cgggggagct caggcatctt agtgtggccc acaaggcagg gcctcctcct 6300 ggctcttctc tgtctttgtc cctctctgcc tccccacccc catacctccc tctttcctct 6360 ggttactctg atctatttcc atttcccaga acatggctgg ctctgtcatc cctcaggcct 6420 tageacttgc tgtttcagct gcctggaaca cccttccccc gtcccctctt acggtggcca 6480 attgccaacc atccttcagg gccacctgga agtggcctct cccatctggt caggtgctgc 6540 ctccacagge cectaeteca eeggatgeaa agteteteet atggeageee etgttettee 6600 cctccaggta gcccgcggcc ccttctggag cccaggacag gggacgcata tgataaactc 6660 aggtgacgtc cgtgatcagt tcatggagat gccctgcctg aagcatctct cagcgccaag 6720 ccatacacca ggcacagcac ccaggcaaac ctgcccaggc tctcagatcc tgaacacctt 6780 tectttgete tggaacecae cagatgacaa agtgggggee aettttecae cetectgeae 6840 ccctcctctc cactctgaac cccgtggtag gctttgtcct cgccatgcat agactcctct 6900 tggggtcacc tcccaacctc tggagcaatg ttgtttttgt acaagaaaca tgtaaatatt 6960 ctcttgtttt aaaatattga agccacacaa gtttgtagag gagaaacatg aaagtcctcg 7020 ttcacgcagc ctcagccctc ccaaggtaag gccaggtagg ctctgcgacc actgcagggg 7080 gagcatctag gcccacctgg gtatcacttt attttatcgt cttttttgtt gttgttttag 7140 agatgacgtc tegttgtgtt teccagagag agtgeagtgg tgeaateaca cetecetgea 7200 gcctggatct cctacgctca agtgatcctc ccaccttggc ctccaaagta gctgggacta 7260 caggtgttcc taccatgcct ggccaatttt tttttattgt gtagagactg gagtctcgct 7320 atgttgccca ggcttgtctt gaactctggg tgatccgcct acctcggcct ctcaaagtgc 7380 tgggattata agtgtgggcc actgtgccca gcccttactg atttatttt aataaatagg 7440 acacaatagg atggatggtt gagtgcctct cctccccatg tggcctgtgc tagtgtttcc 7500 aagccagagg tcctcggggt caccctctgt gactgaggga tacttaggtt gtctcactca 7560 ccccatctgg tetecaaate etaaggeett ggeecagagt tttgeetege acteteete 7620 tetgeeegee etgteeeace tteeetgeet eetgeeette etceateece tggatgetgt 7680 gcccaggtgt ttggctctgg tcccaggtcc cacccacacc tgctggcgct ggaaactcac 7740 tgcactccaa acccagcctt ggaaagactt ctcacctcct cctctcattc ttatcccttt 7800 cctgtctcca gctctggccc ctcctcctcc ctttcttagt ggagaagggg gtctctccct 7860 cettgeetae etgggtgetg etgeagttet geetgtteee ageeaeagee teggtgtage 7920 catggccact gtggcttctg aggcctcctg ggtgtggtcc cctcatgctc ccctgagtgt 7980 ccctcctcta ccagcatggc atactcatag cacagccttt gttcgagctg tcccctctgc 8040 ccaacttctg tgtccccaga cctgtgtccc tcctttaggt ccatctcaag cttccaggat 8100 ccccctgaca ggcccccacc tgaggaagct gcccaagggc ccctggcacg gagggatgca 8160 tgccccccag tgcccagccc ggagcctggc acgtgacccc agagcagggg tgcccagagc 8220 ctgggccagg ctgaatggaa caaggcccca gctccaacct ggacaggcct gtcgccaact 8280 gtgggtggaa cagccactgt cacatgcgga gcggctccca agcgccatgc tttgcgccaa 8340 gacctctatc ccctccacac tgaacctcac gctgagtaag cccacgaggg agccctgtcg 8400 ttcacgcaga gactcagtac tgaaacggag gcttgaccct gtgtctgctg cattcagagt 8520 cacagggcca tgcacactgc gagctgggag atggaagaac agctctgcag agggcagcag 8580 ggcactcagg aacccaagtg acggcagctc ggagccaggg tcccagcctg ggacctcagg 8640 cccagaaact gcgttggagg tgccaaaggt ggctttgctc agcgacctca ggaggcatct 8700 cagggcgtgc agccgggacc ttggcctccg ttccgatgtc gccacctcca caggcccctc 8760 ctggatttcc ctatctgaag aggccaagcc attttctgtc tgtggcactg ggtacatccc 8820 ataccgcatt tgtccctacc tgacgttatc ttgtgactcg ctattttcac gacagcctct 8880 cttcctcagc tctgctggaa ccctagattt tcctattgcc ttgtccttcc tacccaacct 8940 ttaagtggca aggcettgge cacaaggeag ggagteagga gtgggggeea gatttgeagt 9000 caaagtegga tagtggetat gggggacagg aaggagggg cagtggagag teteeggeea 9060 gtggtctcta gccctgacaa gcaggtccct tgggctcccc atctgatgga caggccacga 9120 caggagetea geteetgetg caagagggat geaaatgagg etgtggggge tgggggacace 9180 ccttcctgtc agggtctcca tggcacattg cctgggactg caaggaaggg cgagcctggg 9240 acaggcagag aagcctgaat ggcctggagg gccacttcct tggctgccag ggtcctgggc 9300 ctgcagtccc ctcccccagc actccatcat catttcaagt gattggagct gaaggggatc 9360 gttagctaat taaagctgag gccactaatt gtcccttttg aagagagagc agggctgtgc 9420

aggggaggag acagagggtc tggggagggg gatattggca ggcggggggc tgggaacagg 9480 gccatggccc cttgtggggc cttcttccag actgtgtgtt tgaggggtca ggcattgtca 9540 gaageteett aaagtgggta aaggaetaga gaageagatt tggegeteee gtgatteace 9600 ctgcatcact gtgaatatca gtgcccacct ctgccccacc tctacccact gccacccacc 9660 ctggggctgt gggctggaca gcacatggcg aggcctccca caggcctcct cctctgttgt 9720 gttgataggt cagattggag gacgggcaac tgggtacaag gttcccccaa ctccagcacg 9780 gcccggagca ggaagcctgg gtggcaagtt tctgccttcc cttccacctg tgacagcctc 9840 ttggggaggt gctcaggcct gccaggagta gccagctgca aggtgcatat ccacatgtca 9900 coggagagtg coagotatgo otggggotgo cootcagoot ggcaccaago toccotottg 9960 gcaagaggtc ccagagcctg tgacagaact accaaagagg gttattagtt ttgtattgct 10020 gcaaaacaaa gtagcacaaa catagctact tacaacagca cccttttatg acctcacagt 10080 ttctgtagtc agtggtccag gcacggcatg cgattctctg cccatggccc cactgcgcca 10140 aatcgagatg tcggctgggg atacggcgct catctggggt tcaggggcct cctctaagct 10200 cagggtttgt ggcagaattc agttccttga agtgctagaa tcaaggtgtc cactttgggg 10260 ttctgctgtc agctcccaga ggccccctcc atttccacag ccagcaatgg agaattccct 10320 ccagtggagt cttccacttg cttcaagttt ctgttttcct cacactgacc agcccgggaa 10380 actetetget tttatttatt tattttttaa gagaeggggt eteaetgtat tgtteagget 10440 ggtctcaaaa ctcctgggct caagcaatcc tcccaccttg gcctcccaaa ctgctaggat 10500 tacaggcatg agccactgca cttggcaaaa ctctctgatt ttgaagggct catgtgctta 10560 ggtcgggccc accccaataa tctccttacc tgaaggtcaa gtcttttgga accttaatca 10620 catctgcaaa atccctgcac accagtcccc agatttgtgt tcagttgaat agcggtggga 10680 tgcgcatgtg tacaccgggg gccgggaatc ttgggggcat cttaggagtc tgcctaccac 10740 aatgatgtgg gtcagagaac aaagacagcg ctgaggatag aagcagctga cttccaggcc 10800 aggccctggg cattagtgct gaattatctc attcactcct caggacaatc ctaggagtag 10860 gtgctactat tatcccattt tacaggggaa gcagctgagg ccctgagaga ttaagtgact 10920 ttcacagtca cacagccggt aaatgaccac actgagagat taggggtatg tggggtctga 10980 tccagacccg gctgtgtgtt cttaggaaag tcatgtacct gctctgggcc tctgggaaat 11040 ggatgctgag gtctgttccc catagacaag tgggtgagac ttggggccat gttgcaggga 11100 ctcagcagtc taatctgtgc ccccaccaca ggtagctggc atctgtgaca cccaatgagc 11160 tggggtccct gctgtcagct gtccattcac tgccagtctg acttcttttt ttttttttt 11220 tttttttgag gcaaagtete actettgteg cecaggetgg etgeagtggt gggatetagg 11280 ctcactgcaa cctctgcctc ccgggttcat gcaattcttc tgccttggcc tcccgagtag 11340 ctgggattac aggcacccgc caccacgccc ggctaatttt tgtactttca gtagagatgg 11400 ggtttcacca tgttggccag gatggtctca aactcttgac ctcaggtgat ccaccctcct 11460 cggcctccca aagtgctggg attgcaggcg tgagccacct cacctggccc agtctgacct 11520 ctacaaccca gtgatgatac tccctaacat tgaggctggg aggctccaca gtacaggaac 11580 cccaagatta atggccagga aactgctgct cctccatggg ggctgggccc ctagacaact 11640 gagtggaggc ttgcagacct ttgcccaggg gtggtcgtgc gtgtctgtgg ggcgggtccc 11700 tectaceeet ggggeetgge teteceeact catetggetg cagetetgga aggtagggga 11760 ctgcagaggt gtcagtggct gcccactccc cctcccatga gaaaggctgt cagcgcccca 11820 taggeggeet eeeeceage etecaceee atgetteage ggeeteeete agtaatgggg 11880 ctttatcata gcatgcatta gctaaggcct gctgcctgca attatccctt caatcagcca 11940 cccaccaccc accgcccca gcctcaggcc acccacgggg ccacctcacc cgccctccct 12000 gccccatccc caagtacagc acaggtgccc aagtctctgc agatggacag agcagtgacc 12060 cctggcagca ggcgcctggg gcaggggcag ccagcggaca gagagctact gctcagggtc 12120 acaggcaatt attttaaaag cctgttgcag gagaatgcgc tgcctgtcca gcacaacctg 12180 ctcatcctga gggttgcacc gccccaggtt gctgccaggc tcacgtgcac acacgggtgt 12240 tcacacgtgc cagtcatgca cacagggacg ggcactgcca gggcacacgt ggtgtggatg 12300 cagagecetg tggtetgeac geagacecea gagagatggg gteetggeea eeetegaggt 12360 ctgcgcagaa ggaggcccca cttgcccaag cagccctcat catttggggg ctttccctac 12420 agcccctggc accctcccac ccccatcccc agcacagacc acctcctgac ctttgactcg 12480 cccaccccac gcctggggta cagggacggg ggcctgagct gaatgggagg acttcctgtc 12540 acatccagcc tcacgctggg gttgcgagga gaaataggcg agaaggcgga cctggctggg 12600 ggagtggagg aggggaccgc tgttgtgctg tgattctctc taattgctgt tttgctgaga 12660 ggtaattaaa atctcttttt atttcacacg tcagagcctt cgctagcctg tggagagggc 12720 gcagggggag gctggggggt gggggcagtg gagagccggc gcatggaggg gtcagggagg 12780 tgaagcatct gagcccagcc tgcctgccag gagcccccag ccctgcccgg gcctggccta 12840 tgaccatccc gggtgcagcc caggccaggg gtctatgcag cccatcaaag ccaatgaagg 12900 tcatgataat gaagtcagtc agcaatgtct ctggggtgcc tcccaggtgc aggtgttctg 12960 ctgactgccc aacctgtgaa aaatacaatc atgaccctat gtgtcgggac agagataaag 13020 ctgagacttg gggagattac gaaacagcca gggtttctta acctatggct cttcagtggt 13080 ggaactggat gtgaacaggt ctgactccaa actcggaagc accgcagccg cctgcccatc 13140 cagoccacat aactgtotoc tootgtggac occaettgag gtocacagoo otaccotgac 13200

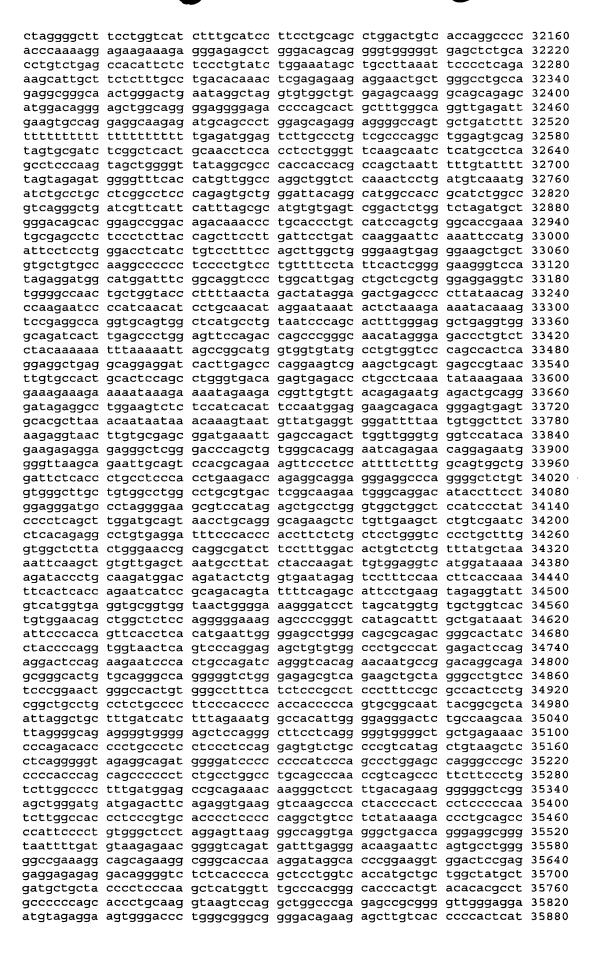
cctcctcaga gcccatggga tgggccacag ccttgggact cctgctcaag acccatgcac 13260 cagtecatge etgecactet ggaceccatg ateacetget gacaggteet ttgggtetgg 13320 agaaccggga ctcacatcgg ccaccaggac ttgtggatgc ttcccaaaga cctgggaagg 13380 ccagggggcc atggcgagac cagagccccg accaatgccc agccagggtc aggcaggaaa 13440 gaagagaaac ctctgccttc tcctgggctg gctggaggca agggggttaa cagtaggtgg 13500 ggtaggcaca ggatccacag agaagcaccc tttggcttca tacccctgca tcaccaagct 13560 tectatgtge ettgetatet ttetteacta gacetgaatt geageaceee ateettgtea 13620 tecteceett ttetaceace ateageacea teacettate tagateatee ttttegeeta 13680 attecceaac atcateacca cetecateat cateateate atcateatea teateateat 13740 catcatccct ttcaacaaaa ccgtcaccac catcatcgcc atcaggactc accttgtacc 13800 tgcactgttg catctcactg aatccttgca acacctacca aggggcaggt accattatta 13860 tcctcccact ttgcagggtg aggagaccat agcttacaat gaaggggctt ttccaaagtc 13920 atgaccagga agtgtcagag gtaggacttg aacctaaact gcttgacatc agagcccaaa 13980 gtcataaccg ctatacttta ccacagtcca tcaaggggtt ctaaggaatc aagctggggg 14040 aggggggcaa gggggaagga aagtggggga gagcaacttg ccacttggac tactcaggag 14100 cagcagcatc agaggcaggc cctccctgca gccagcctgt gctccacccc cactggtgca 14160 tggcagttgt gcccaagcct ccctggctga gctttctacc ctgcagagtt gcatagaggg 14220 gatgttaaaa gggactgtgt tgacttgaga agctgaatcc tagttttgtc tccagtcaga 14280 tggaggccag cttgccccac ctccctcaac atcccctcac ttctgggcca cggctggctc 14340 tgggggggct cattcacctc tcgtgggtgg cggccaggct gaggatggac agtgtgttcg 14400 tttgggctgc tacagcaaac acgacgggct gggtggcttc aacagggcgc gtgtatcctc 14460 acagtcctgg cggctgggtg tctgagacca gggtgccagc acggctggct tccgctgggg 14520 gcctcctggt ttgcagatgt tgtcccctgg ttgtctcctc ccacggcaga gagcagaggg 14580 aggaagcatg ttctctccca tctcttctta gaagggcaca catcccatca tgagggatcc 14640 acceteatgg cetaateace teccagagge eccaacteea gaggeeatee caetaggaat 14700 tagggcttca acacaggaat ttgggggaca ctaatatgca gtccacaata gacagtgagg 14760 ccagggccac geggcagece ageeggaeee ttggtggtgt etcaggaeag gttatggeea 14820 agagaagget ettteeteag eetgeeagee teeetetett eageetteet tgteeeeage 14880 cacagoccag ggcattggcc ttgaagtatt gttcccctag ggtggttgga gtgggcagcc 14940 atatececag acaegageea tetgatgggg gtgetgaggt gggaaatggg ggeeeggggg 15000 actgcagagt aagaattggg ggtccctact acccatctga tgggggtgct ggggtgggaa 15060 atgggggccc gggggactgc agagtaagaa ttgggggccc tgaggcccac tggcaggtgc 15120 tcacctctta caggcaggga tgaggaccca tgtgtgcagg cagctgggtg gactgactca 15180 gagttaagca gatccgggaa gcaagggaca gagggagagg ggaagaggcg aggactgccg 15240 agcagecetg agaggagaag eeggggette etggggetge aggagtgggg taggggetgt 15300 ctcagctgtg tgcagcagcc tgggcctggg ggtagggaag gagctcgtcc atctctgcat 15360 ccccagtgca tagcgctggc actaggaggt acttcatatg tatggaagga aagaatgaat 15420 aaacacattc tcaggattca aactgttctg ataggacatg acacccatgg aggtgctccc 15480 catcattgaa gcaaaagggt tgaaagccca ggctctgaag tcagagtgat ctggattcaa 15540 teccagegee accetecact agetgtggae aggttactta geetetttag geeteaatte 15600 ctttgcccca aaatagggac agtaatatct acccaggcta gatttaagtg agatgacttc 15660 caaagagggc agagaagagc cttgtcccca tcatgggcag ctagggagtg gcccagtgtg 15720 ggcagtcctt gtccaagccc acccctccct ccaggaagga gggaggacag ccagaagccc 15780 tgagetteee teeceattet eeteeaggee etgateaett eecaeacea teatttetee 15840 ccacaaggag aaactgggca cggctgaccc caacgagatg aagttcccca gccagctgct 15900 ccagggcagt gagaagaccc ccagggcagg gccaggaggc agggatgagg gcagagactg 15960 caggatcaag gatcatgggg tgtttggggc cactgggaca tctgggaagg ggccccacag 16020 aggccagtgg agtcccagag cagagggtga gttttctccc tgctacctgc tgagtgaccc 16080 tgcttgagcc cttctggtct ctaagcctcc atttcctcat ctgtaacatg ggaataataa 16140 caggaccaac ctctcagggc tgtcatgggg tttatgaggt gatgctgtga aagtctcgag 16200 tggtagcatg tctggcacac agcagggcct tagccacaca cgcacccaca cacatgcata 16260 cacatatatg tgcagaaaca cacacagggc tggctctgga gccccttccc cctgcccctg 16320 gcacatetgt ggtggtgatg eteteegete teeecteetg teaatgttee etgeeageta 16380 atggaccaat tttttagcat tacggagatt tggccaattt ggcgaccttg acagaaaggc 16440 gcacagagaa ccgttgcctg ggggcggggc gggtgtggaa gccagggtgg gagaggagga 16500 ggaagatggg aaggagaggg gctgtgggct ccaccacctt cggcctgctg ccagccagc 16560 ccctcctagt ccagacaagg cggggtggag ccactgcaga gatcacaaag ataattagcc 16620 ctacttatgg gcccctcctg tgcacggggc cctgtgctaa gcactttgca tatattttct 16680 cttttaatcc tccaataacc ctatgaagtt ggttctatta tttgctctat ccttcctggt 16740 gtggaaactt agacacagga ggctcggagc ttgcccaagg tcacagagcc aggaagtaag 16800 ggagctggaa tggaagctga ggcttgaagc caggcctctt aaccataact gagctgtttt 16860 taactaaagg ctgaaaatta ggacaggaca ccctccacct atccactcag cccctaccgc 16920 ccaccccac cccacctatc cattecteca ccccaacaca cacagtetec aggageeteg 16980

gctgtgtcac cagcctctca gagctccaag ggcaggggat ccctatcagt gacacatggg 17040 cctcatttcc ttctcgggct gaggatgctg tcacacctca aagaccccca gagccagctc 17100 tttctctgcc gggagagagc cctgggcacc acaattgctg ggcatgggca gggttcccag 17160 etectggetg ggetetecte teetgeecag getgtggaet gaggtgteet ggeeagetgt 17220 ggctttcagg gcccctcctg gggtcagtgc cagggtggac gtgggtatca gctgtgtcct 17280 ccattaaaca ttcagggccc ttctgggagc aaggaggcag atctgccagg gaatggggga 17340 ggggtgggag gaggggagg ggagggctgc cacgggcaag gggagggggc tgcggagctc 17400 cgtgcattaa gcgatcagag agcacaatat ttcattgccg gcaatcgcag ccaagacatc 17460 aactacttgg ggagagcagc cttaaaagcc ttttgatttt atttcttcca ctttattttt 17520 tttttttcc tttcccttgc tggtgtcctt gacaaggctt cccttccccc tatcctgccc 17580 cttccccaac cccagctgta atgctcctca ggggcccaga aacctggctg gggagggct 17640 gaggetatgg geteggette tetaaggetg agagggteee eetggggeet geageaceee 17700 cagccagacc caggactgtg tgtgcgcacg cgtgtgtgca ggtgttgctt ggagactcct 17760 gtgcccttgc gtgcatgtat gtgtccctgg gcaccacggc gtgcatatct gaagtatgct 17820 cctgctgaca cacacctgcg tgcgcacagg cccccgtgtg cacacgtgtg tgcatgcttg 17880 ggtgtcaatg ttcacgcgtg tgtgcgtgcg tcctcaccgt gcatgcgccc acagaaaata 17940 ccaccgaagt aagagacgga agagacggga ggttgggggg agttggaggg ggttgttag 18000 ggggaggaga ggggggggg gaggcaagat cagacgacaa agaaagggaa ggcagaggcg 18060 ggggcgggag ggaggtttat ccgtaggagt cagcccagtt gggtcaaact aaggacccag 18120 tgcagacccc gaggcccaga gacacaggtg tgcgcacaaa cacgcactct gcggaaggcc 18180 ggggcgggcc tggccgctgc gggactcctg gcccggogcc cttgacgtca gcggctgggc 18240 cgtgacgtca cctcaccgcc cccgccgcgc tcccgccccc gcccgcgggc actcagtctc 18300 cgctaatggc aggcgacggg gaatggcaca tctgtcttgc cgggaattag ttcattgaat 18360 caggeggeec gagetgegge agegaeetta geeetggeec eagggagggg tetgggeggg 18420 cggcgtgggg gaggttcagg ctggagggct gagtgcgggg acgggaggag gggactcacc 18480 tggactcgcg agggggactg agcgctctcc aaatataggt caatgtcccg ctcagcctcc 18540 ctcccccagc accgtgagga ccgaggcctg gggcctggcg cccgcctggt ggacctcggg 18600 ctttctgcac ctgcccctcg gggtgggtcc ccctctttac cctcgcttcc cccggcgggt 18720 gccgataaag gcggctaatt cccgagcccg gggagggagg gggcgactgt tccagtcaac 18780 acttccccgc gctcttcccc gaccctccca gagcgttccc gctgctcagg gcgaggagca 18840 gctgcggcca gtttgtccta gcggtttagg aggcagggag gtttcctcca gcctggagct 18900 ctggctcggg ccctcgggcc ccaacactt cccgctgaga ccgcgggcgt tgtccctggg 18960 tetetetgee tecattteec ceacetecat tetggttace cettecece actettteet 19020 tectaaeeea tgagageaet ggaaagatge tagaaagteg ggettetaga geeeeageee 19080 tgcctcttgt tcctgcgaga ctgtgggcag gtaatttagc ctctcagccc ctttcatctg 19140 acgctgggaa gtaatgagga gaccccactt ctctgggaag ttcaatgata tgcgtaaagg 19200 gcttagaatt agcagattct ggtagccagt gcgttacggt tttgcactgg ggaggcagag 19260 ctgccgcggg agtgtggctt ctctagaaag atccctgggc acttcagtga tgaaagtacc 19320 acagtgagga ttgtggtgat gcaaagggcg gaagagtctg gtggggctgc caagtgggcc 19380 aggctggggt ccctcgagat ggagtccctt gagataggga ggctcaccca caccagggat 19440 cccaccccaa actcaggctt cgcctccctc tgcttctacc aggttgtgac actgacccac 19500 tgggcttttc acattacttc cacacctttg cttggccctt cccgctttca cccattggca 19560 acttaatttt gaatgettaa teeatgaaca gtateateee eattteacag acaggagaag 19620 gttcaaagag gcagaggttc agagaggtta agtgacttgc caaagacctc acagctatga 19680 catggcatag ctgggatttg aacccagtgc tctggcctca aatgtcaact actctctaat 19740 actotgeete acetetgaga accaettagt tgetaggaga cagcaagete geggttaeta 19800 tgggaactgg gctgatgtgg aaagtggaga gttggtgtcc aggcagcaat gagaaggctc 19860 caggtaggtt ccacatccct cccctgtccc ttccatgaag gcagcccttg gcgttcagct 19920 ctgggttcca gatggcacat gtcctgatgg gacctgaggg aggtgcagtg atggtgagtt 19980 acgctggaaa ctgccctggc aagccaagag ccctggtgga ggatgtggtc ccaaagatgg 20040 qtctqagggg cgagacaggc cagagaacct cacgatcctg ctttccggac atttgctgca 20100 gtcacacctg ccctgcagac agtagtgcag agcagagcct ttccttgtga agtaagaaaa 20160 agggaaggca ggaccatgat ggggcacaga cccatgccag agagttctgg acccaggaga 20220 acacctcagt tetetcaact gtaaaatgag gatgatacca geceetetet catagtgtge 20280 tgagaaaatt gacaaagata caaagcacta tgtctgacac atagacttca ctgactgtgt 20340 gaccttggac aagtcactta gcctctctga gcctctgtaa aatggggata ttaataggac 20400 ctgctttata gggttgctgt agggattcaa catgtgcgta caggtaaagg tcctcccagg 20460 gagacagagt cttgctccgt cgcccaggct ggagtgcagt ggcacaatct cggcttactg 20580 caacetecae ettecaggtt caagtgatte teatgeetea gecaeetgag tagetgaaat 20640 tacaggagcg tgccatcata cccagctaat ttttgtattt tcagtagaga cggggtttca 20700 ccatgttggc caggctggtc tcaaactcag ccacaagtga tccgccagcc ttggccaccc 20760

aaagtgctga gattagaggc atgagccacc atgcccggct ggctgttctg tttgtagagt 20820 agatetecce ageeccagga gtecaggtea etetgaacce ceatgetttt etetetteet 20880 gtctcaggag aaaagcctcc tcctgcccct aaccttttgc caggtgcatg aggaggagct 20940 gaagtgagaa acaggacact ctgaggcccc aggccgcccc tactccaagg cctgaggtcc 21000 ctgtcaggcc acacttcagg gacccggaga ctgggaggct gcggcagcag ggagtgagga 21060 gtgggggcag cgctggcagc tccatttgct cctggccagc ctgtcagtcc cttaatctga 21120 tcccggagga gcagtgcaga ggcttcactc tggatgacaa acgaggaggg gagagtcctg 21180 ctctgcctgg actccgggtg aataatggcc ttgcattaag atattaggtc ggggcgacaa 21240 gaaatqtqcc ctcccttaca tqqctqtgaa qaqcccaqag agqgggaggc ttcctgagga 21300 ctgagccct gggaaggcc gggggagtgg agggatgtcc ggagagggct tgggaagggg 21360 gaggggggg tgagggacac agagacaggc cacggagatg cccagaaaca gagacaccgc 21420 agggagagaa gaagcagaaa gggagggtga cggggggaga cagaggctcc ctgagagaca 21480 gaaagaggag caggggtgtc agagggaggc agaggcagag gcccagatga aggtggtggg 21540 gagggaaagg gaagaaggac aaagagacaa acttggcggg aggggagcag ggggaggggg 21600 gaggecetge geteacacag ggeaaggatg tetecateag gggetteaga tteecaetgg 21660 gggctgtatc cctagccctc cagggagggc caggctggag acagaacttc aaggctggcc 21720 gcttgatgtc cctctacttg atcctgagcc tcctgggtgg ggaaacactg gctggggatg 21780 attgtcctct cagaagtggc tcaggcgaac gttctgggct tccaaccaca ggggcagcac 21840 ccttctgtgg gcagcctgct tctggaggag aggggtcctg gcccccaggg agggggaca 21900 caggggccag ccagagggtg agccccagct ctgggctcct gcactgttct gcaagcccca 21960 tateccacag cetgagteet gagatgeagg getgeetggg geagggacet etggagatga 22020 gccaggccca gagcaaggcg tggggagagc gaagcctgga gagaagaggc tgggagagca 22080 actcaggcag aggggattcc tgacaggctc tgaggggagc ctgcctctct gtcaccacaa 22140 ttcagcctcc ctggacccca caggcccggg tacaaatcct agctccatcc ctttttgttc 22200 tgtgaccagg tgcaggttgt gtgacacacg gtgcctcgct cagtggcccc gcgtgaaaag 22260 ggggatgatt atgattatag eccetectge atgeagette tgtgggggte actgagtetg 22320 tacctggagg attcccggag ccaggactgc catgggctaa cggttcagcg aaccccacaa 22380 atcatcattc atcttattat ttctctaggc ccagccatgt ctgtgtaaac aagatgatac 22440 tgaaaacaag tccctgcacc tccttttct tccattctcc ccagcggctc ttgcccagac 22500 ctgagagtcc tgactcacct tgccaagcca tccacctatc cacatctcaa ttgccgcatc 22560 tgcaaaatgg gtacactgtg aggctccgtg gaagtggtgt gggtaagcac tgaatgaggc 22620 ccacagaagc ctggttcaga tgccctctgc tctgaggacc cctctcctcc agaagcaggc 22680 tgcccaggga agggtgttgc ccctatggtt ggaggcccag cacattcgcc tgagccactt 22740 ctgacaggac agccatcccc agccagtgtc tccccacatg tgcacacaca tggggggaagg 22800 actgggagec teccagagtg gagatgetea ggeacagetg teaggtgagg gagaceecec 22860 aaaaccaggc ctagggcccc atgtacttgg gagtagagga ccccttcccc tgcagcccta 22920 geoestects atsaggaces estimated sagtgetage coetgecetg etcageteae 22980 ggagetgeee getgeagaeg geeeceacet ggtgteeege tgtgetgttg eecetgtgaa 23040 ttgcttaata actgttgaac aaggaggctg cggcgttggt agcggaccct gcactgtgct 23100 cacttgggat tgcacacgtg ggcaaagctg cctggtgggc agcttgaaca gagaggggt 23160 gatttggaaa caggaaaggc agctttggag aaggagggg gcagagtgga aagataatgg 23220 ggagtcagga aaagcagaag gctcacctcc ctgagcccca gaaacctccg aggcagagag 23280 gctgtgtcct gctgggtagg ctgagggagg agggttgggc ttttcatggg gagatgggta 23340 ctggggcatc cacagccact gagattttcc ttcacttgcc ccaagatctc tccctaaatc 23400 teceggettg gaccetttgg ttttatetag eteceagece ttgtggggte etggaatttg 23460 gcccagggct gcccaggact tcctagtcct tcgaggcctg tgactctcac tgagcgccac 23520 caggaggcac ccccacacct gctcacccag gtgggccctg ggaccctcca gcctggcagg 23580 tggggaggag gggcttcctc agggtagagg tggggagggt cttcgggcct caggccttgt 23640 ggctcagaat ccagcagttc agtggttcag cggggaacca gcatgtcccc gcaaggtgat 23700 egtttatete teetgacete ecagtgette ttgecetgae cacagacece tgecececaa 23760 ccagetcaca cacacaceca cagecacact gggtgagtga caggtgtece accagagact 23820 cgcttcccag tgccgctgca cctccatcca cggtcagctt ttctggtcac tccctcagtc 23880 cctaccctcc gagtccttgg ccttagtgtg ggcggagggc caagtctggg gcccggtagg 23940 gccacacctg ctgcacaccc tcttctctct gagcctccat cgcttcctga aggttccatg 24000 gaccaactgt tectaaacat ggtttgtttg gacteatetg geaetttgat actttgatat 24060 tcattcggca ctgccaggcc acctcaggtt gaggtttatc cctgaaccag ctccctaccc 24120 cagcacctcc agtcatgtgc cctctgccct ccagaaagaa acaaagtccc tgaaatatct 24180 ttacattttt ttttctgtgg ataatacacc catataatta aaaaatcaaa gcaattcaaa 24240 gttccactcc cattcccatg tacctggttt cctcttccac cccataaccc cagggggcta 24300 ctttaattct gtgtgtagtc taaaacaaat tatgtgcttt tctttttgtc ctttctcaca 24360 caaaaagtag aatgttcctc atttgagtac actgttcctc attttgtttt cacttaatct 24420 atettgaegt tettteeaca geaatagatt eeteattett tttteacage tgtatagtat 24480 ttcatctctc tctgtcaccc agactagagt gcagtggtac aatcataact cgctgcaact 24540

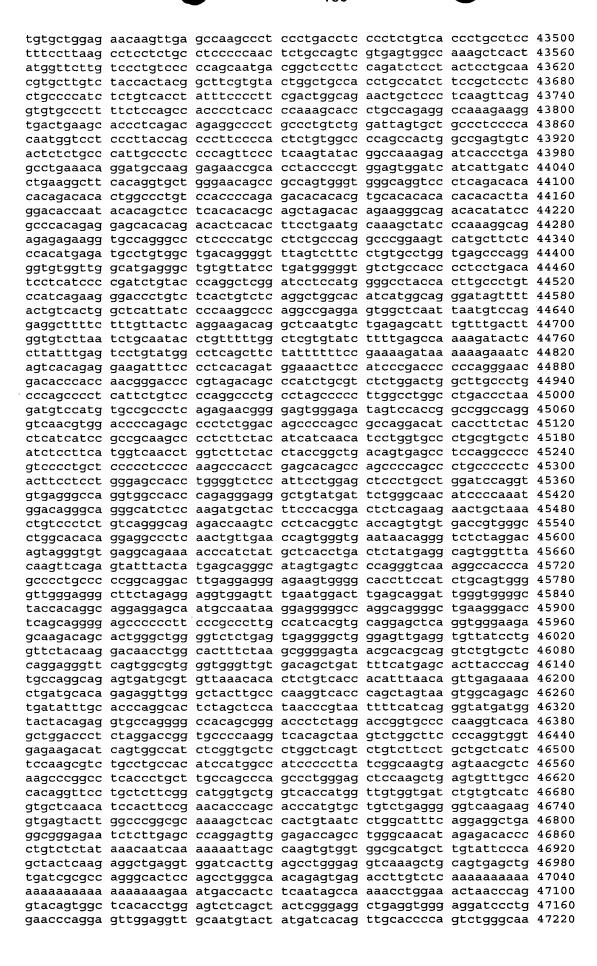
tcaaattcct gggttcaagt gatacttcag cctcctgagt acgtaggatt acaggtgcat 24600 gccaccatgc ccagcctatt tatttacttt tattttatt tttgagacag agtcttcctc 24660 tttcacccag gttggagtgc agtggcacaa tcttggctta ctgcaacctc cgcctcccgg 24720 gttcaagcaa ttctggtgcc tccgcctcct gagtagctgg gattacagtc gtgcaccacc 24780 atgcctggct aatttttgta tttttagtag agacggggtt tcaccatgtt ggccaggctg 24840 atctcgaatt cctgacctca agtgatccac ctgcctcagc ctcccaaatt tctgggatta 24900 caggcataag ccaccgcagc cagccaatgc ctagctaatt aaaaaaaaa atttttttgt 24960 tttttttgca gatatgggga tctcgccatc ttgcccaggc tggtctcaaa actcctggcc 25020 ccaagcagtt cccacctcag cctcccaaaa tgctgggatg acgggcatga gtcatcattc 25080 ccagtctcgt acacggttta ttcaactgag tccttcctcc atcactacct gagttgttgc 25140 tacttttctt ttttgctctt tctgtcaatg ttgcagtgaa catctttgta catctgtcat 25200 tttataactg tgtttttata catatctgta ggacaaaatg ctctgaagtg ggagtactaa 25260 agaataagaa tgcgtgagac caggtgcgat ggcatgacac tttgggaggc cgaggcatga 25320 ggattettga geteaggagt teaagaceag eetgggeaae aeagetagae etetteteta 25380 taaaaaattt taaaacttag ctggatatgg tggcaaacgc ctgtggtccc agctactcag 25440 gaggctgagg aaggaggatc acttgagccc aggaggtcaa ggctacagtg agccgtggcc 25500 acgctattgc actccagcct aggtgacaga atgaggccct gtctcattta agagaaaata 25560 aaaattaaaa ggagaataag agtgtgtgta ctgtgggtag gtatttgtgt aggcattgtc 25620 aactctcact gtgactctcc taaaagcaat gaatgagact gtttctcaac agactcacca 25680 aaatcaaact attggatttt tgccataaat tcacttgtgt tcagtgccct ctcccccagg 25740 aageetgeee tgacetecag agtgtaagea ageeeettee eetgteeeea geaeteaagg 25800 cttctcctac acagcgccgt gtgcatttga gatgacttac atagtcctta ctttttttt 25860 tggtggtttt ttttttttg agacagagtc ttgctctgtc acccaggctg gagtgcagtg 25920 gtgcaatctt gactcactgc aagctccgcc tcccgggttc acgccattct cctgcctcag 25980 cctcccgagt agcctggcta aatgttttgt atttttagta gaaatggggt ttcgccatgt 26040 tagccaggat ggtctcgatc tcctgacctc gtgatccacc cgcctcagcc tcccaaagtg 26100 ctggaattac aggcgtgagc caccacacc ggccagtcct tgctattatt acttctttac 26160 catttgtcta ccaccaggct attagctcca tgagggcagg gactgtgccc cagttctcag 26220 tgcagcatgg gcatgtcata gatgctgagc acacctttgt catctgggac agccccctgt 26280 gtgcccagca ccctagcagc tgctttggct gggtggcctg agctgagccc ctcaacaacc 26340 ttctgaggga ggccctggta ttagctccat tgagcagatg gggagatgga ggctcagaga 26400 caggaggtag tttgctcaag gactcacagc tggccagctg ggaagtcctt acccctcacc 26460 cccacccctc ttgccaacat cctggcttga tttcttccct gctctggtcc gtggggtccc 26520 cagtccccag gaggcgtggt ccggcccagg tcacagtagc aagcccagga tcggccctc 26580 cacaccacct gcagtgatgc agagccaagc tgggggccag cctgagtccc caggggcctt 26640 gtcagcctgc gcggtcaggt cccctgtgca gtggcagtgg cagggaccac agtgaccctg 26700 gtagccatac agttgctaca gccctttccc ggaggccccg tggctgtgct ggctttgtgc 26760 ccaactgtca ctctgtcccc agtggctcct catgctggct gcctgcctcc ctgcctccca 26820 ttaatcatgt gtgtgggatt tattttctcc agcaatttat ttcagcaaat gcaatctggg 26880 tgtgcccgca ggtgggcagg atgctccgtt gctgccagag tcacagagcc cagctttatt 26940 gtcaggctga caggcatgat tccccagcga gcacccccac cgcagatgcc aggtctagcc 27000 aagccctggg gcaggatgct aaggacccct gggactgttg ccacccccac atcactgtga 27060 acctcaaagt cccataggcc tgggagccca gcttgcccca ctctctttat tggttttgct 27120 gcccctacca atgctagctg gctaaagggg tgtaggggaa gattagccct cctgtccttg 27180 gcctaaaacg ggcagccaga ggtctcttcc gaagatccag gtggtggctc ttttcagttt 27240 cctgacctgg ggaaggagga ggtccttcct ctggagcccc ctcctcccca gaactgctgg 27300 gcagcccaga cctgattccc atgacagtca cggagggaaa caatcagcta aggcaaaccc 27360 tgccacccc tcaccaccc cgcaacacgc atcctccttt cgggggctcc ctttcattcc 27420 ttaatcaccc catgcccctc tctctaggcc accaagtgtg gcctccctgg ggctagggaa 27480 aaggacgtgg ctttcaggcc aggacaggag caagtggctg ctcagctatg atttcaggtc 27540 ctgagacacc gctgctccca gttatctgcc cacttacagg ccttggaagt cgaaagggaa 27600 agagctgtgg gcaggggtgg gcagggaccc tccacttggt ctggccctca ccaagccctt 27660 tgcagcctgc acccactccc cccagccctg cagtgtttcc aggggcccag accctagcct 27720 gegggcacct getteetete ttagtatece ecaggtteat cetgaggece cacceccage 27780 ttgccctgcc tggccaggct gcctctaatg ctgcagataa tttctgctgt cgcaaagcca 27840 ttaccctgca aatgggctga ctccagcatg tgtgcgtgtg tatgtgtgtg tgtgtgtgt 27900 ttcccgtgtg tgtgcatgcg cacgtgtgtg caggggaggg ttggctgcgg caggcaaagc 27960 gccttgttta tgcctcgctc atcactgtaa ttgccttggg ggatttattg gctttgtaag 28020 ctctccctgc accctacatg gcctccacct ggccctgagt gatgaggctg ggagctctgg 28080 gcagggggct ggacatgccc agcaggaggg taagtgaggc cttgcggagg gccccctgac 28140 ctatgcaccc accccttcct gctccatgcc tggtagctgg acatagaagg agatagtagc 28200 tggggcaccc ccacgaggcc tctccaacct cagaggctct gaggaggttg ccagtctggg 28260 ggtgcaagat ggatgcagaa gggacactgg aggaactttg gtggcacccg tgtctctggt 28320

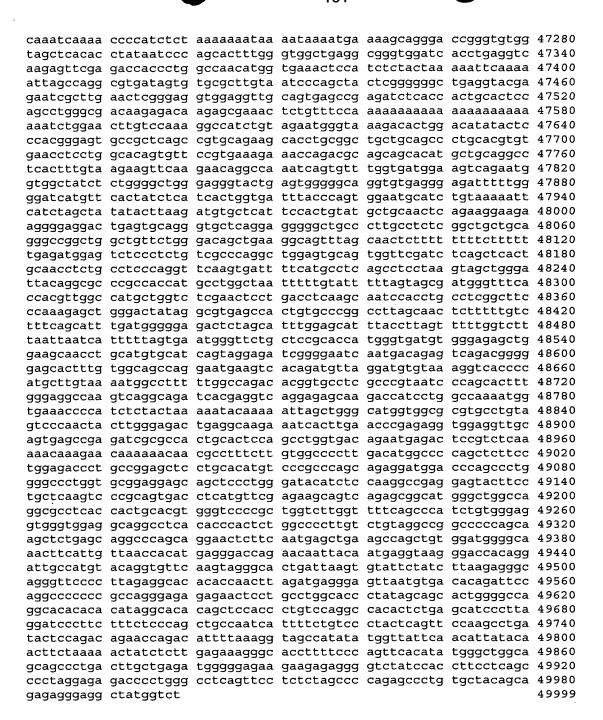
ttctcctctt cctctcccct ttaggtccct cccatcatct gctggcccca accccacgcc 28380 tatatgtett eteagetgtt etgeeteace caeteetgee teacacaget gagteecetg 28440 caagggaaga caaagceteg geeceaaceg ttteateeat tteaagaage tteaacettt 28500 gtgtggctac cttagcaaac ccctgcaggg ttagcagtca gaaggcactt gtggactccc 28560 aaggcagggc tgggcagagg ttgagggtgt ggcctctggc agcaggcaga acagccttcc 28620 atctcttctc cagttcctag cagtgtggtc tcagctaggt caatcaactt ctccgagcct 28680 cagtggcctc atctgtaaaa tgggtctgat gacacctgcc ttaagcagtt attatgaagg 28740 tttgatacat tgtaatacat cgaactacat gaaattccct ttactcaacc agcttttgac 28800 attaatgagt atttactcgg tgaaatatta tatcaataaa ctgtcttatt gaaaagattt 28860 ctacttggtg cctgtccttt tcttttttac tcttgatgtt tcgtatttgt ataaatgcta 28920 cctgctgatt ttaaagaatt caagtaacac aggaaagcac acagaagaaa gtgaaaagca 28980 aaacacaata aaataaacct caatttcaga aattaagcca tcattaataa ataaccacca 29040 tttccagaaa tttcttttta cattgatgca gataagttta gagagataga ttgctagaaa 29100 tttgctgtaa ggagggatcc tattgaaaat tttaatatga cttattaaat ctaatttgag 29160 tttatgttgg cagcagtaaa tgaagcaacc atgaagagaa ccacatgact ccaagaacca 29220 tetetacate agagagatgg tgttttetaa aaagateate taaggetggg egeggtgget 29280 catgcctgta atcccagcac tttgggtggc cgaggcgggt ggatcacttg aggtcaggaa 29340 tttgagacca gcctggccaa catggtgaaa ccccatctct actaaaaata caaaataagc 29400 cgggcatggt agcacacacc catgctacac aggagcccca gctactcagg aggctgaggc 29460 acgagaatcg cttgaacctg ggaggcagag tttgcagtga gcccagatca tgccaccgca 29520 ctccagcctg ggtgacaagg gcaaaactcc atctcaaaaa aaaaatcatc taagttaaca 29580 aaaagatttg aaagcaatag caatgggaaa tactgatcag ggagagtcta ctatgtagga 29640 ggaggggaaa atgggaatag tagcatagaa attgaaggtg ttaaattagc aaatttcaaa 29700 aaaagacaaa agacaaaaaa gaagaacagg agaggaaaca agcaaaattg tgaaatggtt 29820 tgcattcttt tatcacagga ttgaacagtg gtcttcagtg gcatcagtgg tggtctggat 29880 gtatccgtgc ccaaaatatt gagtgagggg agggcgggga ggccaggggt ctcacctact 29940 aaggaaagcc ctggatacag ttccaggatc actccattct cagagaacca cagagcctgc 30000 aggegeecea getteageag tgeteeette tgggetagae ageaceeetg eetetteaga 30060 gccctcttaa agtcaaatac aggccaggca tggtggctca tgcctgtaat tccaacactt 30120 tgggaggctg aagcaggagg attacttgaa cctagaagtt caagaccagc gtgggcaata 30180 tagcaacaag ttgtctcaaa aaaaaaaaaa aaaaaaagcc aagttcagcc catggggaat 30240 agggaaggtc agaacagaaa gcaaagctga aaagctgaaa gggacaggca atccatgagg 30300 aaggccccat ggggagaagc gagctcctac tcagacaaac tagggcccag gccacacaca 30360 acctggggag ccgccgcccc ttctgcagtt tcacatccca tcctgtctca ttctctgctc 30420 teccaeaget ecettgetgt eteccaaget eaggeeetee etgecetete tatatteatg 30480 cagggaaaca gcacttatcg attccgtcac atttacaaag agctgatcta gagcaacgac 30540 cacagteect ggeageeett tgeaggagge etaactgtgt cageteettg aateeeeace 30600 aacaagatgg gggttactag cctatttccc agatgaggac atgaggttga gagaggagaa 30660 gtatatttgt ttccgagggc tgctgttaca agttaccaca aactgggtgg cttcagacga 30720 cagaaattta ttctttcaca gttctggagg cgagaagtct gaaaacacgg tgtcagtgga 30780 gccctgctct cttgaagcct ctccaggaga acctgttcca tgcccttctc atagctccgg 30840 ttattgctag ctgtccttgg cattccccag cttgaattgc atccctccag cctccgcctc 30900 tettgteaca tgacatteae ttgtgtgtet etgtetetgt gtettettgt aaggacacea 30960 gcctattgga tgaagggccc ggtgtgacct cattattaac taactacaac tgcagcaacc 31020 ttatttctga ataaggtcat agtctgaagt actggttgaa cttccacatg tctttttagg 31080 gacacgattc cgcccataac aggaagagat tcacccaaag tcacatggag gtgcaattga 31140 atttccatgc caagetetga attatggtet caggecaaga agacettace teaacetece 31200 ctcacaactt catggggcag ccgcactgta gtcagcaaag ctggcctagc tgcaggtccc 31260 acceteceat etagggacae ggeeceaaag geageetget eagetgetge teceaetetg 31320 cctctttttc ttttcttttt ttcttgagac agtgtcttgc tctgtctccc aagttgcagt 31380 gcagtggcgc attcttggct cactgcaacc tctacctccc aggctcaagt gatcctccca 31440 cctcagcctc cctgagtagc tgggaccaca ggtgcacgtg aacttgccca gctaatgttt 31500 gtattttttc ttttttttt ttttttgtaa agacggggtt tcaccatgtg gcccaggttc 31560 ctactgtgct tttgtccact tcattggaga ggcctaggag gtcaggggag tttgggaagg 31620 agggaaggac aagcacctcc atgacatggg gggtcttcag gagcttggaa gaggaaggcc 31680 ctttcccaaa ggacaactgc agagatgctg catcataggt gggtgccctt ccaggtgccg 31740 gctgtctcct ttccatttcc agaggcccag cccttcccac attcattcct tcgtctgaga 31800 aggetgeagg aetgaeteat ateacetaag eecaetggaa eeteetgaea ggageetget 31860 ggggttttcc agagataaca gtgacaaggt ccaaagttct ttccctgtct cttcttgaaa 31920 tgggaaggtt gagaccaagg cttgcctctg cctgtggaag gatggagatg gagcatctgt 31980 gacctcggag gacacccagg tgtggagaga gggcctgcaa gtgacagacc aagacctctc 32040 tcctcccagg gaagagatat ggaagcctgg agtggaggca gtgagggagg aagaggagaa 32100



aaggaccttt ggctccttct gcccaccctg ctgcgagaag gggccaagaa ctgagatata 35940 ggtgggagag gaggggtgtg gcgggaaagg gaaggggagc tgttgagcat gccgaaagga 36000 atggagagaa ggccccaaga agcagagaga aacggcccgg ggcagcaccc tgcccttggc 36060 tgtcccggcc gaaggtgggc cactcaaaca cagctacttt cagtcaataa agctgagttc 36120 tgcgatgtct gtatctttgg ggtggtgtct ttaaaaaaaa ttgttaagga aaagcacctt 36180 tcaaagatcc cagtccagct cagttgaatt agggagacat cttgggctga gaacctggga 36240 gcacgggctc tgagtgctgg gcccagcgtc cccgggggctc acttgcctcc tcattctgtc 36300 ccaggctggt gggtctcccg aggcagggct cagggctggg gccaggagga tgaggctgag 36360 gctcttcccc aaccacgcat gattgtgtgc cccctgtccc agcagttctg tcggcccagg 36420 ggactcaggc gttgcaggca gcccagagga gcgcccagtg ggcaataaac cgagtggcga 36480 tggagateca geacagateg cacgagtgee gaggtgeeca ceetgeecee egtgeeceag 36540 tgagettget geetaceetg ggeeeattet getgeetetg teeetteeet teagtettea 36600 ctcccctctt gqggqcagag actgtgttgg gccgcaacct agactacgtt tgtgaaggtc 36660 tgtctctccg agtggaaagg acacgctagg cttggggcat ggtctgtgca aaggcaggga 36720 ggcggaaaca ctctgggctc ctgtggtgac caggagaagt tcatggttgc tgaaatagaa 36780 cccgtgtggg ctggagggct gagcgcgaaa ggagagatgg ggagagagag gctcggccca 36840 gcctggggtg aggacaggcg aaagggcagc agtgagactc aaaggtctgt ttctctgcag 36900 gatctgggcg ccccaggcct caagctctcc tccaggaccc acctgagcca ggtgaggctg 36960 aaaaggctcg agggggcagg cctgagagcc gggtgggcct cgaaggcgag gatggccaga 37020 acatgtccct cgtgacaccc cttgcccctt tctagggccg tgcggcgaga ggcgtccgag 37080 cactgccaat gtgacgcggg cccacggccg catcgtgggg ggcagcgcgg cgccgcccgg 37140 ggcctggccc tggctggtga ggctgcagct cggcgggcag cctctgtgcg gcggcgtcct 37200 ggtagcggcc tcctgggtgc tcacggcagc gcactgcttt gtagggtaag taggaccccc 37260 aggeettgee eagetgggt eeeeggeget gggeeeegea eetgeegggt tgteeggegg 37320 gcgacgcgcg ggaaaggtgg tctttgctgc cccctggcgg cggccggccc cgggcttccc 37380 cgtctcaagg cgccgcccc gcccgccag gatgccagcc cggagggggt ggcacggccg 37440 ggcgagttcg ccccctctgg gacgggaccc ctccccggcc cgccctccgt gcccccaggt 37500 ggagaaagcc cggcatgcgg gcggagggc agggtttccg aggggcctgc ggggtgtgcc 37560 cetgteette etgegtetea getgeegete gaceegeage geecegaatg agettetgtg 37620 gactgtgacg ctggcagagg ggtcccgggg ggagcaagcg gaggaggtgc cagtgaaccg 37680 catcctgccc caccccaagg tgagaaggca gtccccaggc ccccaaggct gggcaccgca 37740 ccccacccg tgcttccttg accctgcgcc gcctccccct cctcagtttg acccgcggac 37800 cttccacaac gacctggccc tggtgcagct gtggacgccg gtgagcccgg ggggatcggc 37860 gegeecegtg tgeetgeece aggageecea ggageeceet geeggaaceg cetgegeeat 37920 cgcgggctgg ggcgccctct tcgaaggtac tgggcgtggg tgagccggcg cgtggtggga 37980 agaactgggg gtccgaggta atagagtgtg gggaggccgg gttgccttgg aaaaatgctg 38040 cctgctcttt caaaggggga ggaatcaagg ggggtggtgg gaaggggacc ctcaaggcgg 38100 ggctcttgcc ctccaaacct gagccttcca ccccttccct gcagacgggc ctgaggctga 38160 agcagtgaga gaggcccgtg ttcccctgct cagcaccgac acctgccgaa gagccctggg 38220 gcccgggctg cgccccagca ccatgctctg cgccgggtac ctggcggggg gcgttgactc 38280 gtgccaggta tgaacccagt ctgatgagaa aaggccggct gagccttccc agggccacta 38340 eggeetettt teetteeaeg tetgtetgte aetegaette tetgageete tetgteetea 38400 tecetaaaat ggacacaagt ggcaagetea cacetgecag gegtaaggea ggcgteatag 38460 ggggcaggtg aatgcagcgt cctctctctt ggccccgcag ggtgactcgg gaggccccct 38520 gacctgttct gagcctggcc cccgccctag agaggtcctg ttcggagtca cctcctgggg 38580 ggacggctgc ggggagccag ggaagcccgg ggtctacacc cgcgtggcag tgttcaagga 38640 ctggctccag gagcagatga gcggtgagcg ccctctttcc aatgccccgt ccccagtgcc 38700 ccaacggaca accgtgggac aagcccgttt ccacccggcc catgcccatt cccagctccc 38760 ttctgcctcg ggaaagcctg tctccttccg gggaaggagt gagggggcta gggccccaaa 38820 cagagggtga gctgacccct gtcccgcccg cagcagcctc ctccagccgc gagcccagct 38880 gcagggaget tetggeetgg gaeeeeeeee aggagetgea ggeagaegee geeeggetet 38940 gegeetteta tgeeegeetg tgeeeggggt eecagggege etgtgegege etggegeace 39000 agcagtgcct gcagcgccgg cggcgatgcg gtcagttctg ttcacccgga cccggacggg 39060 caqagetgeg ctegetggeg cacaegetge tgggeetget geggaaegeg caggagetge 39180 tegggeegeg teegggaatg eggegeetgg eeceegeeet ggeteteece geteeagege 39240 tragggagte teetetgeac eccgeeeggg agetgegget teatteaggt acceeggee 39300 ctccagccca gcccagccct ggcccggccc cacccgcgcg gcacagccac tttctccgcc 39360 gaggeggtac cetaaceetg tgeeteecea ggategeggg etgeaggeae teggtteeeg 39420 aageggagge eggageegeg eggagaagee aaeggtaatg aegeeeeetg eegaeettea 39480 ggaggggata ggctgagggc ctggacgagg tcggaagcgc ttctactgca gctccggaaa 39540 gggcttaccc catggggcaa cagggtggac tcgttctccc ctccccgcca tagagcgtat 39600 gactettttg gagtaettgt ggttttaget etcateagtg teaaacagag atgetttgee 39660

tggtgttact gcttaacttc tccgagcctc agtttcccca tctatagcat aagaggataa 39720 gtgtgtcccc tgggaggcca tcctgaggtg ctggtgggag tgccacccc agttccatac 39780 cgcaaccgtt cattattccc ggggcctctc ctcttcctcc aggctgccct gggctggagc 39840 ccctgcgaca gaagttggct gccctgcagg gggcccatgc ctggatcctg caggtcccct 39900 cggagcacct ggccatgaac tttcatgagg taggtcccca ggcttccaga ctccttcacg 39960 atggcctggg aaggctgaga cccagcccag ggaagatgca gagggcccag cccagatacc 40020 ctcccagcag cctggggtcg cctctgcccc agctctgggg gtaggtagag ggtccgaggg 40080 gaagggagtg gggcctgcgg agtgtgagcc aggccactgg gggtggtggt ggggagagtg 40140 agtagagggg tgggtgggag tgtccacatg agcgggaaat gagcagggtt tccaggtcta 40200 ggtgagagtt tctggggccc agggggagag ggggtgacct ctggggtttc aactcaggag 40260 tgagtttctg ggeceetgat ecceaeteet eegtetgtag gteetggeag atetgggete 40320 caagacactg accgggcttt tcagagcctg ggtgcgggca ggcttggggg gccggcatgt 40380 ggccttcagc ggcctggtgg gcctggagcc ggccacactg gctcgcagcc tcccccggct 40440 gctgqtgcag gccctgcagg cttccgcgtg gctgccctgg cagaagggga gcccgaggga 40500 ccctggatgg atgtagggca ggggcccggg ctggagagga aggggcacca cccactcaac 40560 cctcaggtac cccccgccag gcaaccctga gccatgtttg ggcccccagc ccctggggag 40620 gacctactgc teccagggge tgagaggggt tegggageat aatgacaaac tgtegetgee 40680 ccagtggctg ggtgtgtgtg ggtgggatgg ggtgggggtc ctgggccccc cgtgtcttcc 40740 caggtttaca atcagagaat cacagctgct ttaataaatg ttatttataa tacacggaaa 40800 caactctgga gctttcttgg gatgggacct ggtgggtgga cattcagtct caggggtggg 40860 gcccaggcag ggctgcctct ggaagcagtt ggcaagggta acagatgatg gaaaggggct 40920 gtaaggcccc tatctgagcc tatctcctgc ctcctgagaa gcagcagcag atggcctgcc 40980 tgttgccccg cccccgtgca tggctgccca gcgctggccc cagtgcccag cgtctccgcc 41040 cagcacccc ceggeetec etececacce ecegeetecg agetgegggg agteceagee 41100 tgggatettt geeteatgte ettgggetee tgeeetgget ggeeegteee eeacegeeat 41160 gaggtgtcag attgtgtttc cggctgcctc ttcccgttga ccccctcctc ccccaacacc 41220 tgtcccctct cccgcccacc ctcattccac agccctgtag acaggagggg cagatgcacg 41280 tcccagtcag agggatggga tggaggggcc ggtgctgaca ctgggggctgc tggctgccct 41340 ggcggtgtgt ggtaagggaa gacaccctcc ccaccctggg gtcccccgtg atgcttaccc 41400 aggececaca cegeatgget ceteacteae tecactecea etetgecate tetecetgtg 41460 gggggccgcc ttctggggtc cccactccca gggagtggtt gggttccccc ctgctcatcc 41520 caacctcatg gtccagcagg acctcagggc agcttccttc ctgagtcccc tgcccagggc 41580 cccattcagt ccttgtcgct gaccctcccc aggcagctgg gggctgaacg aggaggagcg 41640 gctgatccgg cacctgtttc aagagaaggg ctacaacaag gagctccggc ccgtggcaca 41700 caaagaggag agtgtggacg ttgccctggc cctcacactc tccaacctca tctccctggt 41760 gagaggccct ccggtgctgg gttgggaggg agggcaggga tggctttcca gtaccaggat 41820 agccatggag gaagctagaa gccccacct ggcctatggc cactcccttc ctgggaaacg 41880 tgctgcggct gctctgtgcc ctgagaggct gctgtcctgc ccctccagtg tcagctctgc 41940 ggtgtccccc aaccacaccc atagcatgcc ccatctgtga cacacttcag aggccactgg 42000 tectetetge tecetggegg cetacecact cetgactgeg agtgateagg geccagatge 42060 cacggtttcc ctgggtgcca attgacagtg ggtgaatgta ggctgggtgt ggtggctcat 42120 gcctgtaatc ccagcacttt gggaggccca ggtgggtgga tcacctgagg tcaggagctc 42180 gagaccagcc tggccaacat agtaaaacct gatctctact aaaaatacaa aaattagccg 42240 ggtgtgatgg tgtgggccta taatcccagc tactaggaag gctgaggcag gagaatcgct 42300 tgaacccagg aggcagaggt tgcaggttgc agtgagccaa gctcgtgcca ctgcactcca 42360 tcctgggcaa ttgagcaaga ccctggaaaa aaaaagagag agagagagag agagagagtg 42420 ggtgaatgtg tgcggataaa agaatgatat ggccctgaag gatggcccta ccgtctaatt 42480 acagaaagaa gttgaggaga ccctcactac caatgtgtgg atagagcacg taagaatgcc 42540 cctcccagcc gggcgcagtg gctcatgcct gtaatcccag cactttggaa ggccgagggg 42600 ggtggatcac gaggtcagga gatcaagacc atcttggctg acacggtgaa accccgtctc 42660 tactaaaaat acaaaaaatt agcttggtgt ggtggtgggt acctgtagtc ccagctactc 42720 gggaagetga ggeaggagaa tggtgtgaac geaggaggeg gagettgeag tgageegaga 42780 ttgcgccact gcactccagc ctgggcgaca gaacaagact ccatctcaaa aaaaagagaa 42840 tgccccgccc agagccggtg gggtcgggga gggaatgcag ggcaccagat tgcttctgca 42900 tqqaqatccc qtctqccttq qacactgttc tccaggaggg gttggtgcct ccctacaggg 42960 aaqccccaqq cccaactqtc cttcccccac ctagtgccct caccagccct gatgtcacct 43020 tcaagtggat taggattcac atgttggaaa attgccactt tatcttgatg tttattagaa 43080 aacattctct tcctqcctqt caaaaqtcca caqtacagac acaaatcgtc tatgctcaca 43140 gtagaaataa tgctccctta gttgtgcagt gagcatcctg cacagctgtc catgacagac 43200 ctgaatccgc actctgtacc tgccttcccc aaacctcttt tgtcacagct ctcagaccct 43260 gttcagtctt ctctcaggga agtggggga gccaggagcc tggatggctg cagagtgcac 43320 tggtgacatg cctttgggat tccagggctg gacagacaac cggctgaagt ggaatgctga 43380 agaatttgga aacatcagtg teetgegeet eeeceeggae atggtgtgge teecagagat 43440





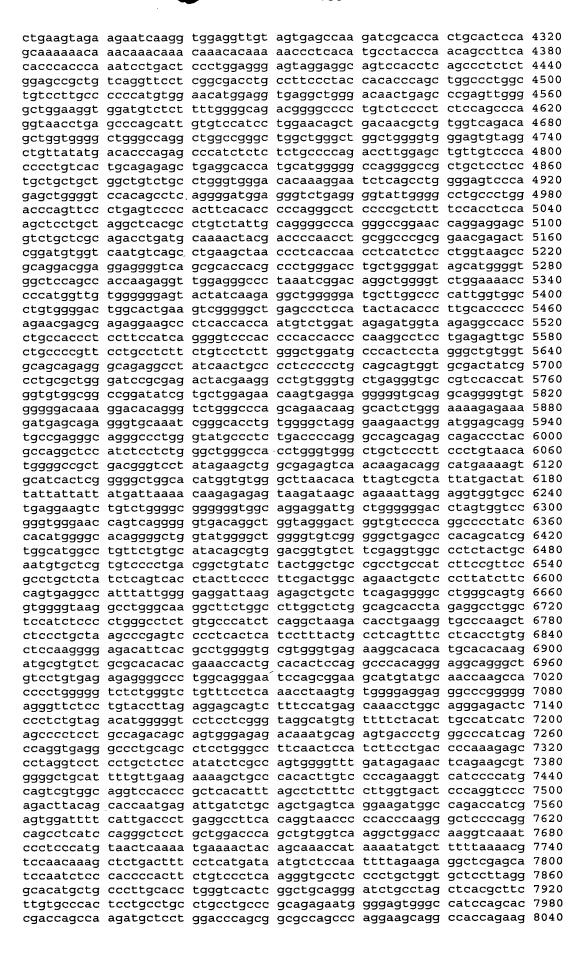
```
<210> 21
<211> 11849
<212> DNA
```

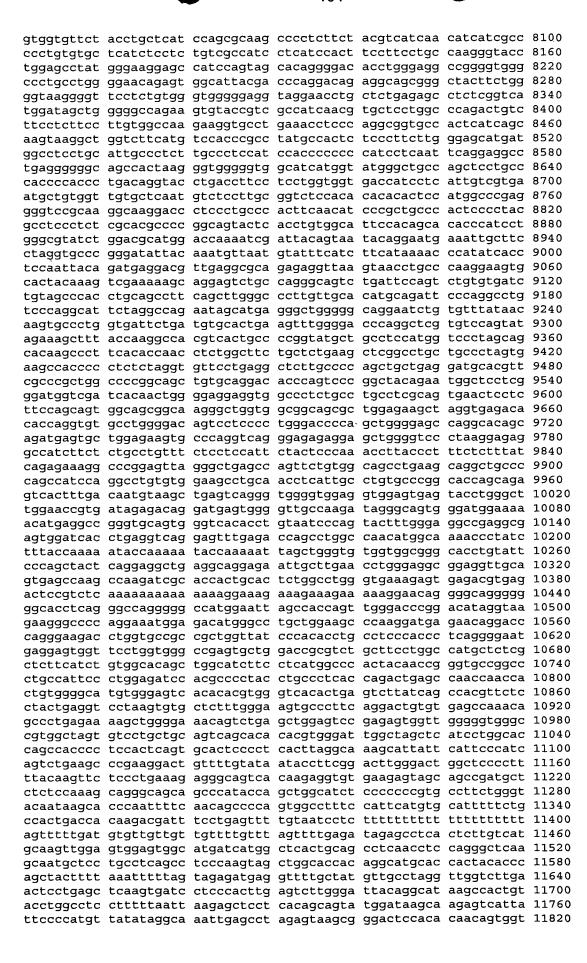
<213> Homo sapiens

<400> 21

```
gttcccgcct cctcaacaga gtgatcagcc ctgcctgtgg ccagaggggc ctgggacctt 60
gctggggaca agccagcatt atcctgcaag cccgaggcag cctctgcagg cacaatgagc 120
cgccctctgc ctccatggct gggccccagc ttgggggtgg ggctttgtgg cctgaggccc 180
tteteacece actetetetg eccetaceca caggagaaag acagetggaa eegagtggee 240
cgcacagtgg accgcctctg cctgtttgtg gtgacgcctg tcatggtggt gggcacagcc 300
tggatcttcc tgcagggcgt ttacaaccag ccaccacccc agccttttcc tggggacccc 360
tactcctaca acgtgcagga caagcgcttc atctagggtg ggcctgttgg ggagccagga 420
gacagcaggg tctgagagag gagccacagt ccctaatgac acccactcct agccctgagg 480
```

ctcgtgcccc tcagactggg gaagagtcca aggaagggag ggagcagcca ctcctcaatg 540 ctcaatggct cccctgaaat caagacaggg gccacccgag atggtctgag ggtggacatc 600 ggctacagtg ggtgggcagg acgatttggg gggaggcccg aggctggctc aggggccagg 660 gaggaggcca ctcagggtgg cctcaggggg agagctctga taggggtgag acagataggg 720 ccccttctat gattctcctc ccccaaggtg tggggtagag caggcaggaa tctgcgcctt 780 cactetetgg eccetecage etecetette etacetacee tteaacetea ggettetgag 840 gcctcacctg ggactgaggt tgaggacacc tccctccctc cagaccccag agtatccttt 900 cctagctctt tctgccttga cctctctgcc taggtccctt tgggaagttg aggactggag 960 tggaaaggtc aggatcgaca tccacaaaga cttggggtca gcctgaggtt gcacacacaa 1020 tectagagga ceagaaegea geaeetetee eeaaagggte eetgeeeee ageaeetaet 1080 cctctccaaa ttagggttgt catgcattat ttggggcata catattctaa aaaatcattc 1140 gttgtttctc tgaaatttgt cccctatttt tatttgctaa atctagcaac cctatcccaa 1200 aggcagcctc cactcaatct tatcctgagg gccaaaggcc aaggctgcag gaattgggag 1260 acaagggtct gtttgtatgg tggtccacct ccaagatggc cccagtgatg cccagtattc 1320 acaccettgt geagteeect caetetgtae cagggtgggt etgggtaace aatagaatga 1380 ggcagaagtg atggtacete actteecaga tttggttagg aaagacacta tggcetettt 1440 cttgctcatt agccctcatt ctcacatcag ttggatctct cactttgggg aagccagctg 1500 gcatgttaag gagccctatg gagaggccca catggcaagg aactaaggcc tcctgccaac 1560 agccacgtga gtgaatgtgg aagtggatcc tctgccccag tagggccttc ggatgagatc 1620 acageceagt agacatetta tgtgeageee catgaaagte eetaageeag aaceaeeage 1680 taagtgactc ctggattcct gacccccaga aactgtgtga gataataaat gtgtgttgtt 1740 ttaagtgaca acgttttggt gtcatttgtt acaccagcaa tgtgaccttg agtgagctgc 1800 tcctcatctc actcctcacc ttccatcttc taatctgcaa aatgtgtgtc tagtaagtcc 1860 tagtcatggg gtgttgtgaa aattgaattt ctagtaggag cattttcatg tgacctgcac 1920 atttaatggg tggtgattta acccatttcc ctcagggggg aattggtgac ctcattaact 1980 cagatataca gaaggtgaga tttttaatgt ttagatgtaa ccaaggaaaa agaaaaacca 2040 tttaaaacca aaactgaccc tagtaacttc tgccttccag catgaactat tcacaaaatt 2100 caaggtacaa atctttaatt gtcctgtcta aataggaaag ccagtttgtt ctcacacctg 2160 tcaggtgagc aggaaatetg agactteece aggaatagec catcaactca gggagggtec 2220 gtcttgtgca cagagagtct agggccctca gccacagtct ttgcttctct ctgcctcatg 2280 gtggcgctgc tggcagcagg tcttggttca accaccaggt gagtcctcag ttctattagg 2340 ccctgctcaa gtggctgtgg acttccagag aagacaaccc caaaatgtca cacaaaaccg 2400 ggggggtgcc tcctgcacag gctcccaggg tcaccacagt ttccaccaga ggcacccact 2460 ccccagcac ggtggtgctg tcaggactgg tccactctga ctgacataga actccatctt 2520 ctgtccccag gaagccatgc tcacaggcac agctttccgg gaagccagag agtgttcctt 2580 actototoca gaccaacagg gotaccotot ototttoaat ggacagtgaa toagtaatac 2640 actggcctgc aaggaacaga aagctgaagg aattgtagct taaacacata aggtttcctt 2700 tttctcacat agtaataata gggaggcgga ggtgatcatg ttggctcggc tgtctaacaa 2760 agetateagg gacceaggea ttttgccate tgcccagcce tgcctccatg gcaagttggc 2820 ttctgtcctc agacctgttg gccccagttt gtgagctgac agccacaget gcacacttag 2880 cacctatgtt caggcagaaa agggccagcc atttctgacc cctttcatca agaagcaaaa 2940 cttttccata ggccgggcac agtggctcac gcctgtaatc acagcacttt gggaggctga 3000 ggcggctgga tcacctaagg tcaagagttc aagaccagcc tgacgaacat ggtgaaaccc 3060 cctctctact aaaaatacaa aaattagatg ggcttggtgg cgcccgcctg taatcccagc 3120 tactcaggcg gctgaggcaa gagaatcgct tgaacccagg aggcagaggt tgcagtgagc 3180 cgagatcaag tcattgtact ccagccttgg cgacaagagt gaaactccaa ctcaaagaaa 3240 aaaaaaaaaa caacttttcc ataaagctcc agtagacatc ccgcaggtca aaacatcaca 3300 tggctagcct atctgaaggg agactaggaa atgagtatct tgctctacca gccattataa 3360 cagagggtgg caaaggagaa gtagtgttag acaattctac agatgatttt ctctgaatgg 3420 gtcctgtccc tgcacacgta acccctgcaa gaaacttcca ttcctcattg atgatttacc 3480 cttcggagaa caccaagaag gcttctaggc catctctccc agagcagaga aagggagaaa 3540 acaggagggt ggagggtagg ggatgcaggg acaggtggtc cactgtttgg cagtgcttcc 3600 tgatcatgga ggccattgaa tttggtaaaa tgtgggcatg gaggagagta aagaggtgga 3660 gagaaactgg tctgcaaaag aggataagaa aactgcatct agggggacca gagggcaaaa 3720 tggaaaggca aggctctcag aagtgagaag gaaacgaggg ctttgtaaat tccaggaaaa 3780 gtgggccaca cagagagaag ctcagtgggg gggatgccca gggaggggga agctcaggaa 3840 gggggaaget cagggaggag gaageteaga gaggaggaag eteagggaaa gggaageeca 3900 gtgaggggga agcttaggga gggagaagct cagggagggg gaagctctgg gaggaggaag 3960 ctcagggaaa gggaagccca gtgaggggga aggtcagcga gggggaattt cagggagagg 4020 gatgctgagt gagggggatg ccgagtgagg ggaggccgag tgaggggatg cccagtgagg 4080 gggatgccca gtggcaggcc aagatgggtg gatcacttga gttcaggagt tccaagactg 4140 gcctggccaa catggtgaaa ccccgtctct actaaaaata caaaaaagaa aaaagaagaa 4200 gaagaagaaa aattagccag gcgtgttggc gcatgccagt agtcccagct actcagaagg 4260





. . . .